



Technical Memorandum:
Delta Risk Management Strategy (DRMS) Phase 1

Topical Area:
Impact to Infrastructure
Draft 2

Prepared by:
URS Corporation/Jack R. Benjamin & Associates, Inc.

Prepared for:
California Department of Water Resources (DWR)

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**Subject: Delta Risk Management Strategy
Phase 1 Draft 2 Technical Memorandum –Impact to Infrastructure**

Dear Mr. Svetich,

Please find herewith a copy of the subject technical memorandum. Members of the Steering Committee's Technical Advisory Committee and agency staff have reviewed the draft technical memorandum, and this second draft addresses their comments.

This technical memorandum was prepared by Mr. Mike Forrest, Senior Project Manager (URS), and Ms. Danielle Lowenthal-Savy, Risk Analyst/Scientist (URS). Technical input was also provided by Dr. Ram Kulkarni, Principal Engineer (URS). GIS input was provided by Ms. Amy Keeley (URS). This technical memorandum was reviewed by Dr. Said Salah-Mars, DRMS Project Manager (URS), and Dr. Scott Shewbridge (URS). Internal peer review was provided in accordance with URS' quality assurance program, as outlined in the (DRMS) project management plan.

Sincerely,

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Preamble

The Delta Risk Management Strategy (DRMS) project was authorized by DWR to perform a risk analysis of the Delta and Suisun Marsh (Phase 1) and to develop a set of improvement strategies to manage those risks (Phase 2) in response to Assembly Bill 1200 (Laird, Chaptered, September 2005). The Technical Memorandum (TM), is one of 12 TMs (2 topics are presented in one TM: hydrodynamics and water management) prepared for topical areas for Phase 1 of the DRMS project. The topical areas covered in the Phase 1 Risk Analysis include:

1. Geomorphology of the Delta and Suisun Marsh
2. Subsidence of the Delta and Suisun Marsh
3. Seismic Hazards of the Delta and Suisun Marsh
4. Global Warming Effects in the Delta and Suisun Marsh
5. Flood Hazard of the Delta and Suisun Marsh
6. Wind Wave Action of the Delta and Suisun Marsh
7. Levee Vulnerability of the Delta and Suisun Marsh
8. Emergency Response and Repair of the Delta and Suisun Marsh Levees
9. Hydrodynamics of the Delta and Suisun Marsh
10. Water Management and Operation of the Delta and Suisun Marsh
11. Ecological Impacts of the Delta and Suisun Marsh
12. Impact to Infrastructure of the Delta and Suisun Marsh
13. Economic Impacts of the Delta and Suisun Marsh

Note that the Hydrodynamics and Water Quality topical area was combined with the Water Management and Operations topical area because they needed to be considered together in developing the model of levee breach water impacts for the risk analysis. The resulting team is the Water Analysis Module (WAM) Team and this TM is the Water Analysis Module TM.

The work product described in these TMs will be used to develop the integrated risk analysis of the Delta and Suisun Marsh. The results of the integrated risk analysis will be presented in a technical report referred to as:

14. Risk Analysis – Report

The first draft of this report was made available to the DRMS Steering Committee in April 2007.

Assembly Bill 1200 amends Section 139.2 of the Water Code, to read, “The department shall evaluate the potential impacts on water supplies derived from the Sacramento-San Joaquin Delta based on 50-, 100-, and 200-year projections for each of the following possible impacts on the delta:

1. Subsidence.
2. Earthquakes.
3. Floods.
4. Changes in precipitation, temperature, and ocean levels.
5. A combination of the impacts specified in paragraphs (1) to (4) inclusive.”

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In addition, Section 139.4 was amended to read: (a) The Department and the Department of Fish and Game shall determine the principal options for the delta. (b) The Department shall evaluate and comparatively rate each option determined in subdivision (a) for its ability to do the following:

1. Prevent the disruption of water supplies derived from the Sacramento-San Joaquin Delta.
2. Improve the quality of drinking water supplies derived from the delta.
3. Reduce the amount of salts contained in delta water and delivered to, and often retained in, our agricultural areas.
4. Maintain Delta water quality for Delta users.
5. Assist in preserving Delta lands.
6. Protect water rights of the “area of origin” and protect the environments of the Sacramento- San Joaquin river systems.
7. Protect highways, utility facilities, and other infrastructure located within the delta.
8. Preserve, protect, and improve Delta levees....”

In meeting the requirements of AB 1200, the DRMS project is divided into two parts. Phase 1 involves the development and implementation of a risk analysis to evaluate the impacts to the Delta of various stressing events. In Phase 2 of the project, risk reduction and risk management strategies for long-term management of the Delta will be developed.

Definitions and Assumptions

During the Phase 1 study, the DRMS project team developed various predictive models of future stressing events and their consequences. These events and their consequences have been estimated using engineering and scientific tools readily available or based on a broad and current consensus among practitioners. Such events include the likely occurrence of future earthquakes of varying magnitude in the region, future rates of subsidence given continued farming practices, the likely magnitude and frequency of storm events, the potential effects of global warming (sea level rise, climate change, and temperature change) and their effects on the environment. Using the current state of knowledge, estimates of the likelihood of these events occurring can be made for the 50-, 100-, and 200-year projections with some confidence.

While estimating the likelihood of stressing events can generally be done using current technologies, estimating the consequences of these stressing events at future times is somewhat more difficult. Obviously, over the next 50, 100, and 200 years, the Delta will undergo changes that will affect what impact the stressing events will have. To assess those consequences, some assumptions about the future “look” of the Delta must be established.

To address the challenge of predicting impacts under changing conditions, DRMS adopted the approach of evaluating impacts absent changes in the Delta as a baseline.

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This approach is referred to as the “business-as-usual” (BAU) scenario. Defining a business-as-usual Delta is required, since one of the objectives of this work is to estimate whether ‘business-as-usual’ is sustainable for the foreseeable future. Obviously changes from this baseline condition can occur; however, as a basis of comparison for risks and risk reduction measures, the BAU scenario serves as a consistent standard rather than as a “prediction of the future” and relies on existing agreements, policies, and practices to the extent possible.

In some cases, there are instances where procedures and policies may not exist to define standard emergency response procedure during a major (unprecedented) stressing event in the Delta or restoration guidelines after such a major event. In these cases, prioritization of action will be based on: (1) existing and expected future response resources, and (2) highest value recovery/restoration given available resources.

This study relies solely on available data. Because of the limited time to complete this work, no investigation or research were to be conducted to supplement the state of knowledge.

Perspective

The analysis results presented in this technical memorandum do not represent the full estimate of risk for the topic presented herein. The subject and results are expressed whenever possible in probabilistic terms to characterize the uncertainties and the random nature of the parameters that control the subject under consideration. The results are the expression of either the probable outcome of the hazards (earthquake, floods, climate change, subsidence, wind waves, and sunny day failures) or the conditional probability of the subject outcome (levee failures, emergency response, water management, hydrodynamic response of the Delta and Suisun Marsh, ecosystem response, and economic impacts) given the stressing events.

A full characterization of risk is presented in the Risk Analysis Report. In that report, the integration of the probable initiating events, the conditional probable response of the Delta levee system, and the expected probable consequences are integrated in the risk analysis module to develop a complete assessment of risk to the Delta and Suisun Marsh.

Consequently, the subject areas of the technical memoranda should be viewed as pieces contributing to the total risk, and their outcomes represent the input to the risk analysis module.

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List of Acronyms and Abbreviations

BNSF	Burlington Northern Santa Fe (Railroad)
CalTrans	California Department of Transportation
CCWD	Contra Costa Water District
CDFG	California Department of Fish & Game
CEC	California Energy Commission
CRCV	Coast Range Central Valley
DRMS	Delta Risk Management Strategy
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIA	Federal Insurance Administration
FIRM	Flood Insurance Rate Map
GIS	Geographic Information System
HAZUS	HAZUS-MH MR2, second maintenance release of the HAZUS MH (HAZUS Multi-hazard) software program, from FEMA
MHHW	Mean Higher High Water
NOAA	National Oceanic and Atmospheric Administration
PG&E	Pacific Gas & Electric Company
PNAS	Proceedings of the National Academy of Sciences
SMUD	Sacramento Municipal Utility District
TM	Technical Memorandum
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation

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1. Introduction

1.1 Background

A large amount of infrastructure is located within the Delta and Suisun Marsh. Some of the infrastructure that crosses the Delta to other parts of California provides vital resources such as water, gas, power, communications, shipping, and railroad freight transportation. Levee failure would cause direct physical damage to residential, commercial, recreational, and public assets. Rupture of petroleum pipelines and resulting spills would cause further environmental losses. Disruption of these in-Delta resources due to levee failure has the potential to cause extreme economic losses to the State and nation as a whole.

1.2 Purpose and Scope

This technical memorandum (TM) is one of 13 technical memoranda on various topical areas that are addressed in the Delta Risk Management Strategy (DRMS) Project. The purpose of this TM is to address the damage to Delta infrastructure assets due to levee failure, the cost of repairs to restore the damaged infrastructure, and the estimated time required to make the repairs.

In this TM, we consider damage to infrastructure assets that could result from levee breaching and island flooding, due to an initiating event (seismic or flooding/overtopping). Infrastructure assets that are damaged or fail as a result of an earthquake alone, without levee breaching and subsequent flooding, are not evaluated. Infrastructure assets that are damaged or fail as a result of flooding caused by levee breaching from an earthquake are within the DRMS study scope.

This TM describes the methodology that was used to estimate damage to Delta infrastructure and presents the resulting costs and schedule durations needed to repair the damage that could occur as a result of inundation from levee breaches due to the hazards that are considered in the DRMS study (i.e., seismic and flood), and potential secondary hazards that may occur due to levee breaches (e.g., petroleum spills). Agricultural losses economic losses due to outages of infrastructure are estimated in the Economic Consequences TM.

The analysis results presented in the technical memorandum do not represent the full estimate of risk of the topic presented herein. The topical subject and results presented are expressed whenever possible in probabilistic terms to characterize the uncertainties and the random nature of the parameters that control the subject under consideration. The results are the expression of either the probable outcome of the hazards (earthquake, floods, climate change, subsidence, wind waves, sunny day failures) or the conditional probability of the subject outcome (levee failures, emergency response, water management, hydrodynamic response of the Delta and Suisun Marsh, ecosystem response, and economic impacts) given the stressing events.

A full characterization of risk is presented in the Risk Analysis Report. In that report, the integration of the probable initiating events, the conditional probable response of the

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Delta levee system, and the expected probable consequences are integrated in the risk analysis module to develop a complete assessment of risk to the Delta and Suisun Marsh.

Consequently, the subject areas of the Technical Memoranda should be viewed as pieces contributing to the total risk, and their outcomes represent the input to the risk analysis module.

1.3 Overview of Approach

The general approach to the work covered under this TM includes several activities and generally follows the approach outlined in the Initial Technical Framework Paper (URS/JBA, 2006). Figure 1-1 illustrates a flow diagram of the approach to estimate potential damage to Delta infrastructure assets due to various stressing events. This figure shows that the work approach is divided into the following three main parts:

- Data Compilation/Asset Definition:
 - Gather Geographic Information System (GIS) data (quantity and type of assets) for each island including asset attributes.
 - Obtain unit cost data and repair times for the infrastructure assets.
 - Define analysis zones.
- Analysis/Evaluation:
 - Assess potential damage to infrastructure due to stressing events.
 - Assess uncertainty in infrastructure repair cost estimates.
- Summary of Results/Tech Memo:
 - Summarize analysis results due to the stressing events.
 - Prepare this technical memorandum on damage assessment potential on Delta infrastructure.

1.4 Organization of Technical Memorandum

After this introductory section, this TM is organized into the following sections:

- Section 2: Presents a description of the infrastructure that includes, linear and point assets in the Delta.
- Section 3: Describes the data sources used to define the Delta infrastructure.
- Section 4: Discusses the methodology and approach that includes the stressing event scenarios (inundation, scour and earthquake), response of infrastructure assets to the stressing events, cost estimation, repair schedule requirements, and assumptions used in the infrastructure damage estimation.
- Section 5: Presents the approach to estimate impacts to Delta infrastructure in 2050.
- Section 6: Discusses the analysis of uncertainty in the repair cost estimates.

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- Section 7: Presents the results of the study that include tables for the estimated cost of repairs to restore the damaged infrastructure, and the estimated time required to make the repairs.
- Section 8: Lists the references that were used to prepare this technical memorandum.

The following supporting appendices are also included:

- Appendix A: Contains the invitation to the October 2, 2006 meeting with major Delta asset owners and a questionnaire.
- Appendix B: Contains data provided by asset owners, completed questionnaires, and meeting notes.
- Appendix C: Describes the information contained in the asset damage tables; i.e., for each island, information is presented as a percentage of damage incurred by the various assets, replacement costs of the assets, estimated repair costs resulting from inundation, and the time estimated for repairs.

2. Description of Delta Infrastructure

2.1 Definition of Delta

The “Delta” includes the following geographic areas:

- Suisun Marsh east of the Benicia-Martinez Bridge on Interstate 680; and
- Legally defined Sacramento-San Joaquin Delta as defined in Section 12220 of the Water Code.

For discussion purposes in this TM, the term “Delta” will be used to describe both the Suisun Marsh and the legally defined Sacramento-San Joaquin Delta. The Delta islands and sloughs and the Suisun Marsh management areas are shown on Figure 2-1.

2.2 Delta Infrastructure

In this TM, the term “infrastructure” is used to designate all structures and buildings, and their contents. The Delta infrastructure can be divided into linear and point assets. Linear infrastructure includes railroads, highways, shipping channels, transmission lines, aqueducts, and gas and petroleum pipelines. Point infrastructure includes bridges, marinas, natural gas fields/storage areas, natural gas wells, commercial and industrial buildings, residences, and pump stations.

Although the Delta levees themselves are assets, they are not considered to be “*infrastructure assets*” that are the subject of this TM. The costs associated with the repair of levees are considered in the Emergency Response and Repair TM. Furthermore, land value and associated damage to land that may result from levee breaching are not within the scope of this TM.

The descriptions of the Delta assets that follow are summarized from information collected in 2004-2005 for the In-Delta Storage Project (URS, 2005), from information collected from asset owners (Appendix B), HAZUS-MH MR2 (FEMA, 2006), and from information gathered under another DWR project (PBS&J, 2006). Section 3 describes the

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data sources that were used to develop the inventory of Delta infrastructure assets considered in this analysis.

2.2.1 Linear Assets

PG&E Natural Gas Pipelines (Figure 2-2)

The main PG&E pipelines that were considered for infrastructure damage estimates are (see Appendix B):

- Backbone Line (L400/401): west side of Delta running north-south, 26 to 42-inch outside diameter (OD)
- Line 196: traverses east to west through the middle of the Delta, 12 to 16-inch OD; mostly 16-inch OD
- Line 108: east side of Delta running north-south, 16 to 24-inch; mostly 24-inch OD
- StanPac (Standard Oil, now Chevron, and PG&E) Line: west side of Delta, 10 to 16-inch OD
- Line 57A (18-inch OD) and Line 57B (22-inch OD) from the McDonald Island Gas Storage Field (see Section 2.2.2). Line 57C (24-inch OD), which will be 4.7 miles long, is under construction and will be on line in 2007 (PG&E, undated). This new line will provide redundancy for gas delivery from the gas storage field.

PG&E has used several methods for installing gas pipelines at water crossings and include the following (Appendix B):

- Exposed “overhead crossings”: generally used at shorter ditch crossings.
- Hung-on-bridge crossings: very limited use due to required permissions involved and limited availability.
- Trenching: widely used for short to river-wide lengths in which a pipe was originally installed approximately 5 feet deep following the contours of the levee and stream-bed with a concrete water-break-wall on the top of the levee.
- Horizontal Directional Drilling (HDD): Initiated in the mid-1970s and widely adopted in the mid-1980s for water crossings. HDD construction will be extensively used for the installation of Line 57C for the McDonald Storage Field.

PG&E Transmission Lines (Figure 2-3)

The transmission lines for 500 kV, 230 kV, and 115 kV voltage levels within the Legal Delta and Suisun Marsh areas are constructed on tower structures (some 115 kV lines are on wood poles). Most of the towers have augered footings with a minimum diameter of 2 feet and at various depths. Only about 10 percent of the towers are on pile foundations (see Appendix B).

- The 500 kV transmission lines are constructed on single-circuit tower structures. The depths of the footings range from 9 feet to 15 feet.
- The majority of the 230 kV transmission lines are constructed on double-circuit tower structures. The depths of the footings range from 9 feet to 20 feet.

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- The majority of the 115 kV transmission lines are constructed on double-circuit tower structures. The depths of the footings range from 7.5 feet to 12.5 feet. Some of the 115 kV lines are constructed on wood poles. Based on the wood pole standards, the typical depths of the pole settings range from 5 feet to 10 feet.
- Almost all the 60 kV transmission lines are constructed on wood poles. The classes and settings of wood poles are designed to meet or exceed the minimum requirements of General Order 95 (see Appendix B). The pole setting depths of wood poles varies from 5 feet to 10 feet depending on the height of the wood poles. Some of the 60 kV transmission lines are constructed on tubular steel poles. The typical foundation size for tubular steel poles at this voltage level is about 4.5 feet in diameter and 17 feet deep.

Based on information in the Levee Fragility TM, major transmission lines are outside the areas of significant peat and organic marsh deposits, except for the transmission lines across Sherman Island.

Highways and Roads (Figure 2-4)

PBS&J (see Section 3.1) has categorized roads as minor roads and major roads, and HAZUS provided data on highways. The following main roads/highways traverse the Delta:

- Interstate 80 – runs east-west through the north end of the Delta, west of Sacramento
- Interstate 5 – runs north-south on the east side of the Delta
- Interstate 680 - runs north-south on the west side of Suisun Marsh
- Interstate 205 – runs east-west on the south side of the Delta
- State Highway 160 – runs north-south along the Sacramento River from Freeport to Oakley
- State Highway 12 – traverses east-west through the middle of the Delta from Fairfield through Rio Vista to Lodi, and through the north part of Suisun Marsh
- State Highway 4 – runs east-west from Interstate 5 to Oakley
- County Roads J4 and J11 – are in the south and central parts of the Delta, respectively.

Kinder Morgan Pipeline (Figure 2-5)

The Kinder Morgan pipeline traverses the Delta from east to west, from Stockton to west of Veale Tract, a distance of about 27 miles. Information provided by DWR indicates that the Kinder Morgan pipeline is a buried steel 10-inch diameter pipeline (URS, 2005). In addition to this pipeline, other Kinder Morgan pipelines cross Suisun Marsh, although their locations are not in the GIS database for DRMS.

Mokelumne Aqueduct (Figure 2-6)

The Mokelumne Aqueduct consists of three pipelines (aqueducts) along the route where it crosses the Delta. The three aqueducts are described as follows (EBMUD, 1995; 1996):

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- Aqueduct #1: built in 1929; 65-inch diameter
- Aqueduct #2: built in 1949; 67-inch diameter
- Aqueduct #3: built in 1963; 87-inch diameter

Within the Delta, the aqueduct has both buried and elevated sections as follows (EBMUD, 1995; 1996):

- Stockton to Whiskey Slough (Holt) – buried section (about 8½ miles). The depth of burial in trenches is about 5 feet; at the sloughs the burial depth is 15 to 20 feet.
- Whiskey Slough (Holt) to Indian Slough (Bixler) (just west of Palm-Orwood Tract) – elevated section, except at the crossings at Middle River and Old River (about 9½ miles). The elevated section is supported on steel bents at 60-foot intervals. Each bent is supported by at least four concrete batter piles.
- West of Bixler – buried section (about 18 miles). About 12 miles of the aqueduct, west of Veale Tract, is close to the legal Delta boundary.
- River crossings – River crossings are at San Joaquin, Middle River, and Old River. At the river crossings, the aqueducts are buried in trenches and backfilled with rockfill. Aqueducts #1 and #2 are on piles that are founded in dense sand at Middle and Old rivers. Aqueduct #3 is buried 30 feet below slough bottoms.

Aqueduct #3 was seismically upgraded so that it could be returned to service within 6 months following the “Maximum Earthquake” on the Coast Range Central Valley (CRCV) fault (EBMUD, 1995; 1996).

Railroads (Figure 2-7)

The BNSF railroad traverses the Delta and Suisun Marsh from east to west, from Stockton to Interstate 780. The other railroads shown on Figure 2-7 are generally around the periphery of the Delta.

The railroad tracks are mainly supported on embankments in the Delta. On the north side of Woodward Island, the BNSF railroad is on a trestle bridge that is supported on piles. No direct information about the depth of piles was available. However, based on experience with similar trestle bridges, the depth of piles is expected to be 70 to 80 feet.

The BNSF railroad traverses between Upper and Lower Jones tracts on an embankment fill, except for a bridge over a passage between the two islands. The west abutment of the bridge was scoured during the June 2004 Jones Tract levee failure (URS, 2005).

Summary of Linear Assets

A summary of approximate lengths of linear assets within the 100-year floodplain (the beige shaded area on the figures indicated above; see also Section 4.1.2) is presented in Table 2-1.

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Table 2-1 Summary of Linear Assets

Linear Asset	Approximate Length (miles)
PG&E Natural Gas Pipelines	280
PG&E Transmission Lines	390
Highways (Interstate highways, state highways, and county roads (as indicated above)	180
Kinder Morgan Pipeline	17
Mokelumne Aqueduct (Nos. 1, 2, and 3)	17
Railroads	120

2.2.2 Point Assets

The locations of the point assets are shown on Figures 2-8 (solid waste facilities and sewage treatment plants), Figure 2-9 (businesses), and Figure 2-10 (miscellaneous data; e.g., ports, airports, and health care facilities).

Residences

Residences are scattered throughout the Delta; however, not all islands are populated or have residential structures. Urban areas (concentrations of residences) within or near the Delta include Rio Vista, West Sacramento (and the “Pocket Area”), Elk Grove, Clarksburg, Hood, Courtland, Walnut Grove, Isleton, Oakley, Brentwood, Stockton, Lathrop, Manteca, and Tracy (see Figure 2-1).

The data pertaining to residential structures was generated by HAZUS. There are several different types of residential structures:

- **Single Family:** This type of residential structure includes single family dwellings, consisting of 1 to 3 stories, regardless of whether or not the house has a basement or whether or not the house is on a split level. The data source used by HAZUS is the Federal Insurance Administration (FIA).
- **Manufactured Housing:** This includes 1-story mobile homes. The data source used by HAZUS is FIA.
- **Duplex:** This type of residential structure includes all grade/sub-grade apartment units in 1 to 5 story residential duplexes. The data source used by HAZUS for residential Duplexes is USACE-Chicago.
- **Triplets/Quads:** This includes all grade/sub-grade apartment units in 1 to 5 story residential triplets and quads. The data source used by HAZUS for residential triplets/quads is USACE-Chicago.
- **Multi-Dwellings:** This category includes all grade/sub-grade apartment units in 1 to 5 story multi-dwelling structures containing 5 to 9 apartment units. The data source used by HAZUS for residential multi-dwellings is USACE-Chicago.
- **Multi-Dwellings (10 to 19 apartment units):** This category includes all grade/sub-grade apartment units in 1 to 5 story multi-dwelling structures containing 10 to 19 apartment units. The data source used by HAZUS for multi-dwellings is USACE-Chicago.

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- Multi-Dwellings (20 to 49 apartment units): This category includes all grade/sub-grade apartment units in 1 to 5 story multi-dwelling structures containing 20 to 49 apartment units. The data source used by HAZUS for multi-dwellings is USACE-Chicago.
- Multi-Dwellings (50+ apartment units): This category includes all grade/sub-grade apartment units in 1 to 5 story multi-dwelling structures containing 50+ apartment units. The data source used by HAZUS for multi-dwellings is USACE-Chicago.
- Temporary Lodging: This includes all low, medium, and high rise motel and hotel structures. The data source used in HAZUS is USACE-Galveston.
- Institutional Dormitory: This category includes all institutional dormitories. Because there is no usable distinct damage function for this category of residences, the damage function corresponding to the Nursing Home category was used. The data source is therefore the same source as for the Nursing Home category, which is USACE-Galveston.
- Nursing Home: This includes low, mid, and high-rise nursing home structures, and the data source is USACE- Galveston.

Commercial Buildings

Commercial buildings are scattered throughout many Delta islands (Figure 2-9). The data source used by HAZUS is USACE-Galveston and includes all low, mid, and high rise structures. HAZUS has defined the following types of commercial structures in the Delta:

- Agricultural Structures
- Retail Trade
- Wholesale Trade
- Personal and Repair Services
- Professional/Technical Services
- Banks
- Hospitals
- Medical Office/ Clinic
- Entertainment and Recreation

Industrial Facilities

Industrial buildings are also scattered throughout the Delta. The data source used by HAZUS is USACE-Galveston and includes all low, mid, and high rise industrial structures. Based on HAZUS data, industrial structures in the Delta include heavy industry, light industry, high technology industry, construction industry, metals and minerals processing, and food and drug chemicals.

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Bridges

There are three different types of bridges in the Delta:

- Highway Bridges: include highway bridges crossing islands in the Sacramento Delta, and the data source is HAZUS.
- Rail Bridges: include BNSF rail bridges crossing the Delta, and the data source is HAZUS.
- Other Bridges: include non-highway bridges from PBS&J all of which are owned by either county or State highway agencies.

Oil/Gas and Water Wells

In this TM, no distinction has been made between oil and gas wells. The data for the gas/oil wells has been provided by PBS&J, and are shown on Figure 2-5. The water wells are located on Bethel Island, Brannan-Andrus Island, King Island, New Hope Tract, and Water Island.

Natural Gas/Field Storage

PG&E has a natural gas field on McDonald Island. The gas field equipment is on platforms 30 feet above ground.

Ports

These assets include the ports of Sacramento and Stockton and ports along the west side of the Delta (Figure 2-10). HAZUS is the data source for ports.

Water System and Power Plant Assets

Water system assets within, or close to, the Delta include pumping plants, gates, and intakes owned by DWR, Contra Costa Water District (CCWD), and USBR. CCWD's assets are described in Appendix B. The pumping plants are shown on Figure 2-6 and include the following:

- DWR pumping plants: Harvey O. Banks (California Aqueduct), South Bay (South Bay Aqueduct), and Barker Slough (North Bay Aqueduct)
- CCWD pumping plants: Old River, Mallard Slough, Rock Slough Intake, and Pumping Plants 1 through 4
- USBR Central Valley Project: Tracy Pumping Plant (Delta-Mendota Canal).

Power plants in the Pittsburg - Antioch area are also within the Delta study area.

Summary of Point Assets

A summary of point assets within the 100-year floodplain (the beige shaded area on the figures indicated above; see also Section 4.1.2) is presented in Table 2-2.

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Table 2-2 Summary of Point Assets

Point Asset	Number (from GIS)
Residences (single family, multi-dwellings, manufactured housing, and nursing residences)	116,535
Commercial Buildings	2,352
Industrial Facilities	126
Government Buildings	355
Schools and Colleges/Universities	72
Churches and Non-Profit	75
Highway Bridges	221
Railroad Bridges	10
Sewage Treatment Plants	20
Airports	5
Natural Gas Wells	291
Substations	32
Cell Towers	16
Tank Farms	14
Superfund Site	1

3. Data Sources for Infrastructure Definition

3.1 GIS Database

A GIS database was provided by the Department of Water Resources (DWR) for the DRMS project. A list of the known assets at this time, organized by category of asset and by island, was provided by DWR. This inventory of infrastructure assets was supplemented by other sources such as PBS&J (2006) under a separate DWR contract. No additional GIS work was undertaken to fill data gaps in the asset inventory.

A summary of the currently available data follows:

- The infrastructure information received from PBS&J was categorized as follows:
 - Utilities, oil, and gas (gas and oil well, transmission lines, etc.)
 - Water (public water supplies, solid waste facilities, etc.)
 - Sewers
 - Communication (cell towers)
 - Transportation (e.g., airports, marinas, major and minor roads, and bridges)
 - Miscellaneous data (e.g., prison and hospitals).
- HAZUS provided feature data, HAZUS Census block count, and cost data for structures (including commercial, education, government, industrial, transportation, and residential categories).
- California Energy Commission data received from DWR includes natural gas pipelines, natural gas storage, natural gas wells, oil pipelines for petroleum.

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A total of 38 attribute tables are available. The types of data available in these attribute tables vary, depending on the type of infrastructure. Table 3-1 indicates the attributes that are listed for each asset type.

URS quantified each asset type per analysis zone by total count (point features), total length (line features), and total area (polygon or area features). Because some asset types lack information, it was not always possible to generate a unit cost from the GIS data alone. Much of the data lacks sufficient definition of quantitative attributes to evaluate reliable repair/replacement costs. For example, road widths and treatment plant capacities are often not described. Even if a helpful attribute column is in a data table, often times the column is empty or has no data. URS has attempted to remove inaccurate data and data overlaps. Many of the gaps in data and metadata can be attributed to a lack of a regional geographic information system that is consistent across political boundaries. In many cases, assumptions had to be made so that damage loss could be estimated.

3.2 Data from HAZUS

The base map data HAZUS uses to show counties, census blocks, census tracts, etc. is based on the 2000 Census TIGER¹ data. Census blocks are shown on Figure 3-1. The inventory data used to calculate the number of structures (or commonly called building counts) within census blocks/tracts is also based on the 2000 Census data, but has been updated in the latest HAZUS release (MR2). The update was not based solely on building counts, but rather it was based on the square-foot replacement costs from R.S. Means assigned to structures to calculate replacement costs. The R.S. Means square-foot costs were updated to 2005 and take into account differences in structure replacement costs around the U.S.

HAZUS census block count and cost data for structures are originally for census blocks that do not correspond to the analysis zones being used. For each census block, the percentage of the block that fell within the analysis zone was calculated and then the same percentage of the count and cost was applied to the asset type numbers. This approach makes the simplifying assumption of a uniform spatial distribution of the asset types across the census blocks. Analysis zones are shown on Figures 3-2, 3-3 and 3-4.

¹ The term TIGER[®] comes from the acronym **T**opologically **I**ntegrated **G**eographic **E**ncoding and **R**eferencing which is the name for the system and digital database developed at the U.S. Census Bureau to support its mapping needs for the Decennial Census and other Bureau programs.

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Table 3-1 Data Available in Attribute Tables

Asset Type	Attributes
Airport Points	Internal Feature Number, Facility Type, Full Name, FAA district and type, City, State, Owner Type, Island Name
Airports	Internal Feature Number, Name, City, Owner, Use, Cost, Cargo, Number Of Flights, Number Of Passengers, Island Name
Bridges	Id, Name, Owner, Width, Lenmaxspan, Length, Scour, Traffic
Bridges not in HAZUS	Internal Feature Number, Name, Owner, Width, Maximum Span (Length), Length, Traffic, Island Name
Businesses_esri	Company Name, Sales Volume, Number of Employees, Island Name
Comm. Networks_HAZUS_SDURS	Objectid, Name, City, Owner, Use, Cost, Island Name
Dams_HAZUS_SDURS	Dam ID, Name, River, Maximum Storage, Normal Storage, Surface Area, Drain Area, Island Name
Delta Roads	Internal Feature Number, Name, Dam Type, Category Type, Island Name
Electrical Power Facility	Internal Feature Number, Name, Address, City, Island Name
Fire Stations	Internal Feature Number, Name, Cost, Island Name
Flying Services	Internal Feature Number, Company Name, Sales Volume, Number of Employees, Island Name
freeport_piperoute_preferred	Internal Feature Number, Island Name
gas_pipeline_kinder_morgan_LS_9	Internal Feature Number, Operator Name, Diameter, Island Name
Hazmat	Internal Feature Number, Name, Chemical Name, Island Name
hc_ambulatory	Internal Feature Number, Company Name, Sales Volume, Number of Employees, Island Name
hc_hospitals	Internal Feature Number, Company Name, Sales Volume, Number of Employees, Island Name
hc_nursing res	Internal Feature Number, Company Name, Sales Volume, Number of Employees, Island Name
Hwy Bridge	Internal Feature Number, Name, Owner, Width, Numspans, Length, Maximum Span (Length), Scourindex, Traffic, Cost, Island Name
Marinas	Internal Feature Number, Name, Public?, Number of Berths, Gas?, Dry_Boat, Island Name
Natural Gas Facility	Internal Feature Number, Name, Address, City, Owner, Island Name
NG_Pipelines_DWR	Internal Feature Number, Owner, Diameter, Legend, Island Name, Length (Ft)
NG_Storage_DWR	Internal Feature Number, Name, Owner, Comments, Status, Island Name, Total Acreage
NG_Wells_DWR	Internal Feature Number, Operator, Well_No, Island Name, Island Name, Total Acreage
Oil Facility	Internal Feature Number, Name, Address, City, State, Use
PBSJ Buildings	Building Name, City
PBSJ Cell Towers with Analysis Zones	Internal Feature Number, Address, City, Island Name
PBSJ Substations	Internal Feature Number, Name, Voltage, Circuits, Island Name
PBSJ_Gas_Oil_Production Fields	Internal Feature Number, Name, Island Name, Acreage
PBSJ_Gas_Oil_Wells	Internal Feature Number, Operator, Well_No, Island Name
PBSJ_Mokelumne_Aqueduct_Pipe	Internal Feature Number, MOKEPIPE_, IGDS_OFFSE, FID_Analys, Island Name, Region, Length (ft)
Petr_Pipelines_DWR	Internal Feature Number, Length, Operator Name, Diameter, Legend, Length (Ft)
Pipeline Transportation Services	Internal Feature Number, Company Name, City, State, Sales Volume, Island Name
Police	Internal Feature Number, Name, Cost, Island Name
Ports_HAZUS_SDURS	Internal Feature Number, Name, Owner, Use, Cost, Island Name
Prison	Internal Feature Number, Name, Address, City, Island Name
Rail	Internal Feature Number, Name, Owner, Length, Newcost, Island Name, New Length (Ft)
Rail Bridge	Internal Feature Number, Class of Bridges, Name, Length, Maximum Length Span, Traffic, Cost, Island Name

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As a check on the HAZUS data, *Google Earth*TM was used to count the numbers of building structures on 20 islands/tracts in the central Delta and to compare these numbers with those in the HAZUS database for buildings (residential, commercial, and industrial structures). The 20 islands checked were Bacon, Bethel, Bouldin, Bradford, Brannan-Andrus, Byron, Holland, Jersey, Jones (Upper and Lower), Mandeville, McDonald, Orwood, Palm, Quimby, Sherman, Twitchell, Venice, Victoria, Webb, and Woodward. The results of this check indicate that the number of structures observed in *Google Earth*TM exceeded the HAZUS database by about 30 percent for these 20 islands. This increase may be due in part to the more recent structures observed in *Google Earth*TM (2004 to 2006 images) that post-dated the 2000 census block data. Even though a 30 percent increase was estimated, the HAZUS data was used because the overall 30 percent factor would not apply to all areas of the Delta. This check indicates a limitation of the data (see Section 7.3).

3.3 Data from Major Asset Owners

We contacted major owners of assets in the Delta to provide data and information that were used to estimate damage potential. Sources of such information include the following:

- A meeting was held on October 2, 2006, with the major commercial and public entity asset owners to make them aware of the infrastructure damage assessment effort and to elicit their support (i.e., guidance, documentation, etc.). The meeting invitation is included in Appendix A. The following major asset owners were contacted: DWR, East Bay Municipal Utility District (EBMUD), Pacific Gas & Electric Company (PG&E), Western Area Power Administration, Burlington Northern Santa Fe (BNSF) Railroad, Port of Stockton, Port of Sacramento, California Department of Transportation (Caltrans), Kinder Morgan, AT&T, San Joaquin Council of Governments, Sacramento Municipal Utility District (SMUD), and CCWD. Some of these asset owners responded with completed questionnaires or provided information during follow-up telephone conversations or meetings (Appendix B).
- Follow up meetings and telephone conversations with asset owners to obtain information on damage potential, costs of and time required for repair work (see Appendix B). In addition to the above major asset owners, the California Energy Commission (CEC) and the California State Fire Marshall were contacted to obtain information on liquefied gas pipelines. Waste water treatment districts were also contacted.
- CCWD, DWR, and USBR pumping plants were also included based on data provided by CCWD (Appendix B) and DWR (1995; 1999).
- Studies and reports that were available from utility companies.

4. Methodology/Approach

The approach to the work to estimate damage potential is discussed in this section and includes the following topics:

- Define stressing events.
- Assess response of infrastructure (damages/failure) due to the defined stressing events.
- Estimate cost of island infrastructure restoration.
- Estimate schedule (duration) for island repairs and restoration.

The above topics are discussed in the sections that follow. The approach to evaluate additional impact of water level rise and island subsidence 50 years in the future (2050) is covered in Section 5.

4.1 Stressing Events

The following stressing events were considered to evaluate potential damage to Delta infrastructure:

- Inundation (levee breaching and island flooding for two different flood stage conditions):
 - Mean Higher High Water (MHHW)²
 - Flooding from 100-year flood
- Scour due to levee breaching is included with inundation (i.e., scour of levee and landside of island is followed by inundation/flooding of an island)
- Earthquakes are considered if they cause levee breaching and island flooding

As will be discussed below, the area of the 100-year flood covers a larger area than that affected by MHHW.

These stressing events are discussed below.

4.1.1 Mean Higher High Water (MHHW)

The National Oceanographic and Atmospheric Administration (NOAA) maintains several tide stations in San Francisco Bay and has installed many temporary tide stations throughout the Bay and Delta. Although limited data are available from these stations, the data were reviewed to provide an estimate of the level of MHHW throughout the Delta. Tidal data from seven stations were reviewed to estimate MHHW in the Delta. Because

² There are two high tides and two low tides each lunar day (24 hours and 50 minutes) in the San Francisco Bay and Delta. The two tides are unequal, one of the high tides is higher than the other and one of the low tides is lower than the other. The higher of the high tides each day is known as higher high water (HHW) and the lower of the low tides is known as lower low water (LLW). Mean Higher High Water (MHHW) is the mean value of all the higher high tides for each day over a 19-year period (or “epoch”). (Mean Lower Low Water (MLLW) is the average of all the lower low waters during the same 19-year period.)

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of the limited data available in the Delta, it was assumed that MHHW was constant in the Delta, which is an approximation as the level may increase up the rivers.

The MHHW elevation was entered into a GIS database that contained the topography of the study area. The intersection of the topographic surface and the MHHW surface is the MHHW boundary, as shown on Figure 4-1. Assuming a breach occurred during MHHW, the depth of inundation of infrastructure in an island is calculated as the MHHW surface elevation minus the ground surface elevation.

4.1.2 100-Year Flood

The estimate of the boundary of the 100-year floodplain was developed from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs)³. FIRMs from the following counties were used in the estimate: Yolo, Solano, Sacramento, Contra Costa, and San Joaquin. The boundary was identified by evaluating the estimated flood elevation at the locations indicated by the FIRMs. This information was used to approximate the area that could be inundated if the levee(s) at that location were to fail. These elevations were sometimes representative of water surface elevations within a channel, for example the San Joaquin River, but were often elevations within the floodplain (e.g., outside of the levees). Where both existed, the value in the floodplain was used⁴. These elevations were entered into a GIS database that contained the topography of the study area. A surface was developed from the floodplain elevations. The intersection of the topographic surface and the floodplain surface was the floodplain boundary. This 100-year floodplain boundary is shown on Figure 4-1, together with the MHHW boundary. This figure shows that the area affected by the 100-year flood would cover a larger area than that affected by MHHW. Assuming a breach occurred during a 100-year flood, the depth of inundation of infrastructure in an island or tract was calculated as the 100-year flood plain surface elevation minus the ground surface elevation.

4.1.3 Scour Zones

As will be discussed in Section 4.2.2, a scour hole due to levee breach was assumed to be 2,000 feet long (perpendicular to the island perimeter/levee). As such, the areas of islands that would be vulnerable to scour extend 2,000 feet inboard of and parallel to the island levees/perimeters. Figure 4-2 shows the perimeters of the scour range for each of the islands and tracts in the Delta. Figure 4-3 shows a schematic representation of the affected extent of a linear asset within a scour zone in an island.

4.1.4 Earthquake

As stated in Section 1.2, infrastructure assets that fail as a result of flooding/inundation caused by levee breaching from an earthquake are within the DRMS study scope. The

³ FEMA FIRMs are in the process of being updated and the area in the 100-year floodplain may be changed significantly based on studies that are currently under way.

⁴ On the FEMA FIRM maps for the Delta, elevations of the 100-year water surface (100-year flood elevation) provided for an island may differ from the value of the flood elevation given for the adjacent river. In these cases, the flood elevation provided for the island was used to generate the 100-year flood map since the flood map was meant to represent the case with flooded islands.

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effects of earthquakes are considered insofar as they would cause levee breaching and island flooding. Flooding was assumed to result from the MHHW level (the 100-year flood and a major earthquake were assumed not to be coincidental). As previously stated, direct damage to assets caused by an earthquake alone, without a levee breach and island flooding/inundation, was not evaluated.

4.2 Response of Infrastructure to Stressing Events

For infrastructure facilities, damage was assessed assuming each island and adjoining sloughs are flooded. Approaches to assess damage are discussed in the sections below.

4.2.1 Damage Due to Inundation

For each island in the Delta, the percent damage to each asset within the island was estimated assuming that the island is flooded. Using available GIS data for Delta resources, the quantity of each asset that would be damaged was estimated. A unit cost of repair or replacement of the damaged asset was estimated based on experience with similar projects. The total cost impact was calculated as the product (percent damage x quantity x unit cost).

The following summarizes the approach used to estimate damage to infrastructure due to inundation of an island:

Point Assets

- Data from HAZUS-MH MR2 (FEMA, 2006) was used to estimate flood inundation losses for point assets (residential construction, commercial buildings, etc). HAZUS provides data on replacement costs of these assets. Repair/replacement costs are based on a percentage of the total replacement cost (percent damage times the replacement cost). The percentage of damage incurred, from HAZUS, is based on inundation depths within a given island. In accordance with FEMA, inundation depths causing greater than 50 percent damage to a structure will typically result in total loss of the structure.
- For point assets not covered by HAZUS, repair/replacement costs were estimated by using the unit cost taken from historical data and conceptual-level cost estimation. Cost data from wastewater and sewage treatment plants was obtained from owners when available.
- Based on information from DWR (Telephone conversation, G. Gravier, DWR, 2006), DWR pump stations (e.g., Banks) would not be vulnerable to physical damage as a result of levee failure. A levee failure, however, would affect water quality and thus the pump station's ability to deliver water due to salinity and environmental issues. Similarly, power plants were assumed to be undamaged as a result of levee failure.
- Landfills and solid waste facilities were assumed to be undamaged as a result of levee breaching. It was assumed that such facilities were designed and constructed to withstand erosion due to flooding.
- Tank farms were assumed to be damaged due to scour, but not due to inundation, as these facilities typically have perimeter containment berms.

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Linear Assets

- For linear assets, such as gas pipelines, water pipelines, transmission lines, and railroads, repair costs were either obtained from historical experience as reported by asset owners or by approximate cost estimates.
- If there were only inundation, with no scour, natural gas pipelines would generally not be vulnerable to damage. This is because the pipelines are typically buried 5 feet deep; this burial depth would preclude flotation.
- Pipelines are vulnerable to damage from scour (see Section 4.2.2). Scouring would remove the soil cover, and the natural gas pipelines would float. There has not been a ruptured gas pipeline as a result of island scour, because the steel pipelines are flexible (see Appendix B). PG&E would reduce the operating pressure in a pipeline that floats (due to soil removal), and would repair it by anchoring (Appendix B). However, if a pipeline were to be in the direct path of a scour hole that has a length of 2,000 feet, it was assumed that such an event would likely cause rupture of a pipeline due to the high velocity and turbulent flow conditions.
- It was assumed that buried aqueducts would not be vulnerable to inundation (with no scour). However, elevated aqueducts may be damaged if inundated. The elevated portion of the Mokelumne Aqueduct was damaged during the June 2004 Jones Tract levee failure (URS, 2005). The repair costs to the exteriors of the three Mokelumne Aqueduct pipelines for the Jones Tract failure was \$10.6 million, for a length of 5¼ miles. The aqueduct pipelines remained in service during and after the Jones Tract levee failure.
- Transmission lines and cell towers were assumed to be vulnerable to scour damage, but not inundation.

4.2.2 Damage Due to Scour

The dimensions of scour holes were based on historical data from Delta levee failures as discussed in the Levee Vulnerability TM. Scour holes typically have a bowl shape and can be as deep as 77 feet (Levee Vulnerability TM). For infrastructure damage assessment, a scour hole was assumed to be 2,000 feet long landward of the levee (perpendicular to the island perimeter/levee), 500 feet wide (parallel to the island perimeter/levee), and 50 feet deep. These scour hole dimensions are assumed to apply to both the MHHW and 100-year flood events, and for current and 2050 conditions to evaluate assets potentially vulnerable to scour damage. As a result, the scour limits shown on Figure 4-2 would remain unchanged.

As stated above, Figure 4-2 indicates the areas around the island perimeters that would be potentially vulnerable to scour damage. Scour holes could occur anywhere within the island perimeters shown on Figure 4-2.

Important components to assess vulnerability to damage of infrastructure due to scour include their locations with respect to a potential scour hole and the type of foundation support system. Infrastructure supported on deep foundations that extend sufficiently below the depth of scour (piles substantially deeper than 50 feet) would have less vulnerability to damage and failure than would infrastructure supported on shallow

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foundations. Heavy structures such as bridges and aqueducts (e.g., the Mokelumne Aqueduct) are typically founded on deep foundations that extend below layers of peat and soft ground. Although such structures would be less likely to fail as a result of flooding than assets that are founded on shallow foundations, the 50-foot-deep scour zone, together with the lateral loading due to the inward flow of water, was assumed to be sufficient to cause failure of infrastructure assets that are within a potential scour zone.

During the June 2004 Jones Tract failure, scour of the west bridge abutment for the BNSF railroad embankment occurred. The bridge crossed over a passage within the embankment between Upper and Lower Jones Tract. Water flowing from Lower to Upper Jones Tract caused the scour damage to the railroad abutment and undermined the tracks; the damage amounted to about \$8 million in repair costs (URS, 2005). This scour damage potential was considered in the analysis of scour damage potential within Jones Tract.

4.3 Damage Estimation

4.3.1 General Methodology

Damage to Structure Assets

Costs to repair damage to various infrastructure assets were estimated from various sources. Unit prices were estimated from available cost data and repair costs from historical failures (e.g., the June 2004 Jones Tract failure) (URS, 2005). Where such cost data were unavailable, costs were estimated from construction industry cost data (e.g., using published information in R.S. Means, 2005) and from asset owners.

HAZUS provided cost data for point assets as discussed in Section 4.2.1. Spot checks were made to compare the cost of residences from HAZUS with real estate listings in the West Sacramento area (considering that land costs are not accounted for in HAZUS; see also Section 2.2).

For linear assets, such as gas pipelines, water pipelines, roads, and railroads, asset replacement costs and repair costs were obtained from historical experience as reported by asset owners (e.g., utilities), published data, or by approximate cost estimation. Asset replacement cost data for linear assets are presented in Table 4-1.

Loss of crops and farmland are estimated in the Economic Consequences TM.

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Table 4-1 Estimated Replacement Costs for Linear Assets

(estimated cost in \$ million per mile)

Natural Gas Transmission Pipelines ¹	
4" to 8" dia.	0.65
10" dia.	0.70
12" dia.	1.0
16" dia.	1.2
20" dia.	1.5
24" dia.	1.7
30" dia.	2.1
36" dia.	2.5
42" dia.	3.3
PG&E Line 57C ²	
24" dia.	8.5
Kinder Morgan Pipeline ³	
10" dia.	1.1
Mokelumne Aqueducts ^{4,5}	
3 parallel aqueducts: 65", 67", & 87" dia.	26.4
Railroads ⁴	
Single track	1.5
Roads/Highways ⁴	
2 lanes – minor road	0.5
2 lanes	1.0
4 lanes	1.7
Transmission Lines ⁶	
60 kV lines on wood poles	0.42
115 kV lines on tubular steel poles, towers, or wood poles	1.3
230 kV lines on steel towers	1.3
500 kV lines on steel towers	1.7

Sources:

¹ Adapted from Parker, N. (2004). Using Natural Gas Transmission Pipeline Costs to Estimate Hydrogen Pipeline Costs, UCD-ITS-RR-04-35, Institute of Transportation Studies, University of California, Davis.

² PG&E (undated). Gas Transmission and Storage 2005 Rate Case Testimony, Chapter 5, Line 57C Reliability Report.

³ URS (2005). In-Delta Storage Program, Risk Analysis, Draft Report.

⁴ URS, cost estimate.

⁵ EBMUD (1995). Final Report, Mokelumne Aqueduct Seismic Upgrade Project, Preliminary Design.

⁶ Communication with PG&E, Electric Transmission.

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Damage to Building Contents

In accounting for damages to building contents, the approach recommended by HAZUS was used. This approach involved:

- Calculating the value of building contents as percentage of the structural replacement value.
- Multiplying the contents value by an estimate of the percentage damage based on HAZUS depth-damage relationships for different building types.

HAZUS provides the following building content values as percentages of the structural replacement values (FEMA, 2006):

- Residential: 50 percent
- Commercial: 100 percent
- Industrial: 150 percent
- Government: 100 percent

Debris Removal Costs

Debris removal costs are a substantial cost immediately following a flood event after repair of levee breaches and dewatering. Our literature review has shown that these costs are highly variable, but typically comprise about 10 percent of total damages (Water Studies, 1995). For Hurricane Isabel, which in 2003 cut through large tracts of Virginia, debris removal costs were estimated at almost 7.5 percent of the estimated damage costs of \$1.6 billion (Virginia Department of Emergency Management, 2003, website). Based on our review of literature, debris removal costs have been estimated at 10 percent of the total damage costs (infrastructure plus contents).

Environmental Clean-up Costs

Environmental clean-up costs were also estimated and include cleaning up petroleum product/chemical spills. One such clean-up was the April 2004 diesel fuel spill (approximately 124,000 gallons) from a Kinder Morgan pipeline in Suisun Marsh (U.S. EPA, 2007). Historical cost data on environmental clean-ups in the Delta were unavailable. As such, these costs were based on historical costs of recent clean-ups in other marsh/wetland areas of California. Based on experience, spill clean-up and subsequent mitigation costs as a result of a petroleum pipeline break was estimated to be in the order of \$10 million.

4.3.2 Multiple Island Failures

Cost estimates in the asset damage tables (see Section 7) are assumed to apply for up to five island failures. The cost for repairs due to multiple island failures is likely to be more than for a few island failures due to many complexities. If there is a sudden increase in the demand for construction, it is expected that the construction costs would increase due to the supply and demand issues for equipment, labor and, materials. With multiple levee failures, scaling factors (multipliers) have been used to increase costs of repair. The insurance industry refers to what has been termed “scaling factors” in this TM as “post-event inflation” or “demand surge”. To support the use of scaling factors, literature from

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post-catastrophic events was reviewed, including Hurricane Katrina (see Section 8, References, for websites used to estimate cost scaling factors for multiple island failures). Estimates of scaling factors were found to typically range from about 1.2 to 2.2 for extreme catastrophic events such as Hurricane Katrina. Based on the literature review, cost scaling factors estimated for multiple island failures are indicated below.

For multiple island failures (up to 30), scaling factors will be applied to the estimated costs. Linear cost scaling factors (for both point and linear assets) that would be applied to more than five island failures are as follows:

- 1 to 5 island failures: 1.0
- 10 island failures: 1.2
- 20 island failures: 1.6
- 30 island failures: 2.0

4.4 Repair Schedule Requirements

4.4.1 General Methodology

Repair duration/schedule requirements are needed for the Economic Consequences TM for estimation of economic losses to various businesses/utilities during the time when infrastructure is out of service following a levee failure event. The schedule for repairs is measured from the time access to an island is gained to initiate repairs to damaged infrastructure until repairs are completed. This information is based on historic experience (e.g., the June 2004 Jones Tract failure as reported in URS, 2005; Hurricane Katrina, see Section 4.4.3).

The Emergency Response and Repair TM addresses the time required to repair island levee breaches and pump out the flooded islands. The sum of the levee repair and island pump out time plus the asset repair time represents the total outage time for which there would accrue an economic loss and adverse economic consequence to asset owners.

Some infrastructure assets can only be repaired or replaced after the levee breaches on an island have been repaired and the islands pumped out and include residential, commercial, government and industrial structures, and water treatment plants.

We have developed relationships of repair times versus percent damage for the various asset categories for up to five inundated islands. The estimated repair times were based on average percent damage up to 50 percent, at which point full replacement would occur (see Section 4.2.1). For residences damaged more than 50 percent, the estimated replacement time would be 2 years. For commercial, industrial and government buildings damaged more than 50 percent, the estimated replacement time would be 1.5 years. The relationships between repair times (Tr , in months) and average percent damage (D , in percent) for residences and other structures (commercial, industrial, etc.) are as follows:

$$\text{Residences:} \quad Tr = 0.48D, \text{ for } D < 50\% \quad (1)$$

$$\text{Other structures:} \quad Tr = 0.36D, \text{ for } D < 50\% \quad (2)$$

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Other infrastructure assets could be repaired and returned to at least partial service prior to levee breach repairs and island pump out. After island pump out, final repair work would be performed.

For up to five island failures, the following repair times are considered for linear assets:

- Information gained from EBMUD indicates that emergency repairs to the Mokelumne Aqueduct can be repaired under water prior to pump out of a flooded island (see Appendix B). EBMUD indicated that it could operate Aqueduct #3 without Aqueducts #1 and #2 for several years (EBMUD 1995; 1996).
- Transmission towers could be repaired prior to island pump out.
- In the event of a failed natural gas pipeline, PG&E would isolate the failed segment by using automated valves. Customers on either side of the failed pipeline segment would be supported by other gas pipelines in the system (see Appendix B). PG&E reported that a break in Line 57B in a levee area would take about two months to repair (PG&E, undated). Line 57C (see Section 2.2.1) would provide gas supplies due to an outage of Line 57B. The information provided by PG&E indicates that natural gas pipeline repairs have taken between 3 and 4 weeks (see Appendix B).
- The BNSF railroad embankment was repaired in less than a week during the June 2004 Jones Tract failure, prior to island pump out.
- It is assumed that highways and roads could be repaired in less than a month after island pump out.

Based on the above, repair times were assumed to be one month for linear assets (except for Interstate Highways), for up to five flooded islands. For Interstate Highways, repair times were assumed to be one week.

4.4.2 Multiple Island Failures

For multi-island failure scenarios, certain questions need to be acknowledged. For example, if many islands were to be flooded, would homes be rebuilt at all? If so, would it take many years or decades before people choose to rebuild in an area that just had deep, long duration flooding? As well documented by New Orleans, a large flood changes the “picture” of rebuilding and future development in significant ways that would likely endure for decades. Nonetheless, in the paragraphs that follow, it was assumed that rebuilding would occur.

Levee failures that occur on multiple Delta islands due to a major event (e.g., a major Bay Area earthquake) would affect the time to repair infrastructure even though the response to a major event in the Delta would be nationwide; contractors and materials would be mobilized from many areas of the country. The response time to multiple levee failures may be longer than for an isolated failure of a levee. This longer response time following major events would result from several factors that include the following:

- Availability or adequacy of disaster relief funds
- Access to inundated areas - many roadways would be damaged or destroyed

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- Competition for resources (e.g., construction labor, equipment, materials)
- Prioritization and phasing of restoration and repairs.

Lifeline systems (e.g., water, gas, power, communication systems, and railroads) would be among the first infrastructure assets to be brought back on line.

Point Assets

The repair time estimates for point assets allow for an estimated 6 months for cleanup and establishing access to the islands after they have been pumped out, but prior to starting asset repair work. Once access and other critical/emergency resources such as hospitals and emergency shelters have been provided, replacement and repair of point assets could begin.

Inundation of multiple islands would require longer response and repair times. Because of the lack of information on repair times (due to the absence of historic experience), especially for multi-island failures, judgment was used to estimate repair times. Section 4.4.3 provides a comparison of repair times with the estimates made for reconstruction activities in New Orleans following the August 2005 Hurricane Katrina. To address this longer response and repair time for multiple island failures (up to 30), scaling factors will be applied to the relationships for repair times. The assumed linear repair time scaling factors for point assets that would be applied to more than five island failures follow:

- 1 to 5 island failures: 1.0
- 10 island failures: 1.4
- 20 island failures: 2.2
- 30 island failures: 3.0

Linear Assets

Linear assets may be damaged by inundation, but they would likely not fail and result in loss of service. Scour, however, would cause linear assets to fail (see Section 4.2.2). The time required to repair linear assets damaged by scour under multiple island failure scenarios would depend on a number of factors such as extent of damage and access. Based on information provided by asset owners, it was assumed that PG&E natural gas pipelines, railroads, transmission lines, Kinder Morgan pipeline, and the Mokelumne Aqueducts would be repaired prior to pumping out flooded islands. Such repairs may be made under water (e.g., for the Mokelumne Aqueducts; see Appendix B) or within areas protected by sheet pile cofferdams constructed from barge platforms.

For multiple island failures (more than five islands) involving multiple disruptions to linear infrastructure assets due to scour, the following repair times are considered:

- PG&E natural gas pipelines, railroads, transmission lines, petroleum pipelines: 3 months (island pump out not required for repair)
- Mokelumne Aqueducts: 6 months (island pump out not required for repair) (EBMUD, 1996; Appendix B)
- Highways (repair times after island pump out):

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- Interstate Highways: 1 week
- State Highways: 3 months
- Other Highways and Roads: 6 months (assumed to be repaired after State highways are repaired).

4.4.3 Comparison of Reconstruction Times with Hurricane Katrina Estimates

It is useful to compare the estimated repair times for Delta assets with estimates for reconstruction activities in New Orleans following the August 2005 Hurricane Katrina. Reconstruction can be broken down into four post-disaster periods: emergency response, restoration, reconstruction, and betterment reconstruction as defined below (Kates, et al., 2006) and as they may be related to the DRMS effort for the Delta:

- Emergency response: Search and rescue, emergency shelter and feeding, establishment of order, clearing of major roads, etc. For the DRMS effort, this period covers temporary housing and loss of government services (see Economic Consequences TM) and repair of breached levees and pumping out of islands (see Emergency Response and Repair TM).
- Restoration: Repairs to essential infrastructure.
- Reconstruction: Providing for infrastructure and housing.
- Betterment reconstruction: Providing for improvements to infrastructure (not included in DRMS scope).

These periods overlap, and the second and third periods last roughly 10 times longer than the previous period. For New Orleans, the main part of the emergency response time was about 6 weeks and the restoration period was about 40 weeks (about 10 months). The estimated reconstruction time for New Orleans would be between 8 and 11 years (Kates, et al., 2006).

For the Delta, following multi-island failures, the reconstruction of residences could be on the order of 2 years (for less than 5 island failures, Section 4.4.1) times a factor of 3 (for 30 island failures, Section 4.4.2), which equals 6 years. This time estimate compares reasonably well with the New Orleans estimate of 8 to 11 years.

4.5 Assumptions Used in Infrastructure Damage Assessment

The following assumptions were used in the infrastructure damage assessment:

- Infrastructure would be maintained at present levels (i.e., no deterioration of infrastructure over time).
- Available loss estimation models are applicable for future years. For example, the loss estimation model (which predicts the amount of loss corresponding to a certain depth of inundation) is applicable in the present as well as in future years.
- Depth of inundation values represent the average value for the entire analysis zone because the asset type was not individualized but from a census block level or from a line length (see Section 3.1). An island is divided into analysis zones in which the average depth of inundation was estimated for each zone. The depth of inundation in

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each analysis zone was used to estimate the depth of inundation for the assets lying within the boundary of that same analysis zone. Thus, an asset located within the boundary of an analysis zone in which the average depth of inundation is 15 feet would also have a depth of inundation of 15 feet. However, because the depth of inundation values represent averages, variations of inundation depth across the analysis zone are not taken into consideration.

- In the case where a structure has several subclasses incurring different percentages of damage, the average percentage is used for all subclasses of the structure. For example, consider two different subclasses of a single-family residence: a 2-story single family residence with a basement, and a 2-story single family residence without a basement. Although the amount of damage incurred by each of the two residences will most likely be different, the amount of damage incurred by each is considered to be the average of both.
- If a damage function was not found for a specific occupancy type, it is assumed the damage function for a similar structure would suffice. For example, no damage function was found for Institutional Dormitories, so the damage function in HAZUS for Nursing Homes was used for the dormitories.
- The repair cost for the Kinder-Morgan pipeline is based on the In-Delta Storage Program Risk Analysis Report (URS, 2005).
- Elevated segments of the Mokelumne Aqueduct (Orwood Tract, Upper Jones Tract, and Woodward Tract) are assumed to incur damage as reported for the June 2004 Jones Tract levee failure. For that event, the three aqueduct pipelines incurred \$10.6 million in damage over a 5¼-miles of the aqueduct, resulting in a cost of about \$2 million per mile. This damage cost was assumed to be the same regardless of the duration of inundation. Buried segments of pipelines and the Mokelumne Aqueduct are assumed to incur zero damage as a result of inundation (without scour).
- Gas oil production fields, natural gas wells, and natural gas storage facilities are assumed not to incur damage due to inundation (without scour). The oil and gas wells on the islands are normally shut down if flooding is impending, and would not be damaged. It has been assumed that the wells would be shut down in time.
- As stated above, an asset within a scour hole is considered to be destroyed and, therefore, the repair cost is equal to its replacement cost. The estimated damage due to a scour event is based on a differential cost defined as: differential cost = [asset replacement costs in a 2000-foot-long scour zone] minus [cost damage due to inundation in the scour zone, for the MHHW event and for the 100-year flood]. The differential cost due to scour can be added onto the damage due to inundation to obtain the total asset damage within an island.
- The quantity of each asset type from HAZUS (residential, commercial, education, industrial, and government buildings) was calculated by assuming a uniform distribution of assets within each census block (i.e., the scour zone would have the same density of structures as the entire census block). Based on this assumption, the quantity of assets within the 2000-foot scour zone was estimated (the average number of assets per census block was prorated to estimate the average number of assets per

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scour zone). The GIS data indicated the average number of commercial structures for each census block. To estimate the number of structures within the scour zone of an island, the quantity from the census block was prorated as follows: $[(\text{area of scour zone})/(\text{area of census block})] * (\text{number of structures in census block})$.

5. Estimate of Impacts to Delta Infrastructure in the Future

An estimate of impacts to Delta infrastructure in the next 50 years in the future (approximately 2050) was made. This estimate depends on the following three factors:

- Asset changes - change in the amount of infrastructure assets as a result of population growth.
- Delta water level rise - increase in MHHW and 100-year flood levels due to climate change.
- Subsidence - decrease in island elevation levels due to oxidation of peat layers.

The increase in water levels, coupled with the decreasing island elevations, would increase the amount of inundation of Delta assets in the future. The percentage damage would therefore increase, resulting in greater future repair costs and repair times. The depth of inundation-percent damage functions (in HAZUS) will be assumed to remain unchanged with time.

The above three factors are discussed in the sections that follow.

5.1 Asset Changes

The change in the density of point assets, such as residential, commercial, and industrial buildings, will depend on population growth. In addition, minor roads and treatment plants would increase with population growth. The population for each island in 2030 is based on the California Water Plan Update (DWR, 2005). A linear growth rate was assumed between the present and 2030 for each island, and then extrapolated to 2050, unless the island population reaches saturation, in which case, no growth was assumed.

By comparing the 2030 population to the present population, a prorating factor (rate of change of population) was obtained for each island. These factors were used to estimate asset density for each island in 2050. Where population data are unavailable, the asset growth rate was estimated by using the household growth rates (provided by DWR). The prorating factors were applied to assets that depend on population (e.g., residential, commercial, industrial buildings, and minor roads).

Owners of high value infrastructure assets (e.g., aqueducts, natural gas pipelines, transmission lines, railroads, etc.) have indicated there are no current plans to increase such infrastructure in the Delta despite population growth projections (see Appendix B). Accordingly, it was assumed these assets would remain unchanged through 2050.

5.2 Delta Water Level Rise

As stated in the Climate Change TM, water levels in the Delta are expected to rise due to sea level rise resulting from global warming. Values of mean sea level rise for 2050 (relative to 1990 levels) were obtained from the Climate Change TM. The range was

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20 to 41 cm, with a mean value of 30 cm (1-foot). For assessing the impact of sea level rise on infrastructure in 2050, 1-foot was selected for the mean sea level rise. This sea level rise amount was added to the current MHHW level and the 100-year level (defined by FEMA; see Section 4.1.2).

5.3 Subsidence and Depth of Inundation

Subsidence of the Delta islands is occurring and will continue to occur as a result of oxidation of peat layers. The island elevations in 2050 were provided in the Subsidence TM. These elevations were used to modify the topographic data of the Delta.

With the modified topographic data and the information on sea level rise, new potential inundation boundaries and inundation depths for 2050 were estimated. The inundation boundaries for MHHW and 100-year flood events for 2050 are compared with the current boundaries, as shown on Figure 4-1. As shown on this figure, the change in inundation area is small for the MHHW and 100-year flood events. Therefore, it was considered that the current inundation boundaries are sufficiently accurate for estimating asset losses in 2050.

With the increased inundation depths, damage to point assets for each island was estimated by using the depth-damage functions in HAZUS.

6. Analysis of Uncertainty in Infrastructure Repair Cost Estimation

6.1 Types of Uncertainty

Infrastructure repair costs for several asset types were estimated using a depth-damage relationship that relates percent flood damage for a given point asset class in a given island and the depth of inundation in the island. This relationship was based on published results of previous studies, including the HAZUS model developed by FEMA. Because the actual data available for deriving such relationships are generally limited, there is uncertainty in the derived relationship. This uncertainty is due to limited data and/or knowledge gaps and is termed *epistemic* uncertainty. In principle, the epistemic uncertainty can be reduced with the collection of more data (i.e., damage data from more flood events).

Even when a large amount of damage data is available from many flood events (which would make the epistemic uncertainty negligible), the actual percent damage from the next flood event, and the corresponding repair costs, cannot be predicted with certainty. This uncertainty is termed *aleatory* uncertainty and cannot be reduced even with the collection of more data.

Approaches to assessing the two types of uncertainty – epistemic and aleatory – are described below.

6.2 Assessment of Epistemic Uncertainty

If sufficient data are available on observed damage from past floods, regression analysis of the data may be used to derive a depth-damage relationship and to assess the standard error in the best-fit regression line. The standard error is a function of the amount of

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scatter in the data around the best-fit line and the sample size. Epistemic uncertainty in the depth-damage relationship can then be represented by defining alternative relationships with specified confidence levels.

If sufficient empirical data are not available for regression analysis, the approach would be to develop alternative depth-damage relationships that might model expected, pessimistic, and optimistic estimates of damage that represent the range of epistemic uncertainty. In this analysis, the expected depth-damage relationship was based on the published models in HAZUS. The pessimistic and optimistic depth-damage relationships will define upper and lower bounds on the percent damage for any given depth of inundation. These bounds are based on the scatter in the damage estimates from events with similar depth of inundation. The three depth-damage relationships may be defined such that the expected relationship has the highest probability of being the correct representation, which was judged to be 50 percent, while the pessimistic or optimistic relationship each has a lower probability of being the correct representation, which was judged to be 25 percent. A given depth-damage relationship will be assumed to apply to all assets; that is, the epistemic uncertainty for different assets will be assumed to be correlated.

An assumed depth-damage relationship directly affects the extent of damage to each class of assets and the corresponding repair costs. The expected depth-damage relationship was used to estimate repair costs for different assets in various Delta islands assuming each island is flooded. A confidence level of 50 percent was assigned to these repair costs. Based on experience with the accuracy of estimated repair costs, the pessimistic and optimistic depth-damage relationships were estimated to result in plus 30 percent and minus 15 percent change from the costs estimated using the expected depth-damage relationship. A confidence level of 25 percent was assigned to each of these two scenarios.

The DRMS procedure for assessing epistemic uncertainty is similar to the one used by the USACE HEC-FDA program (USACE, 1998; Version 1.2 is current version) in which the uncertainty in the depth versus percent damage function is specified in terms of percent standard deviation (i.e., a coefficient of variation). Note that the upper- and lower-bound curves to be developed in the DRMS analysis can be used to assess an average percent standard deviation.

There are, however, some differences between HEC-FDA and DRMS methods of specifying and analyzing uncertainty. One difference is that, whereas HEC-FDA specifies the uncertainty separately for three types of damage (structure, contents, and other), DRMS specifies the uncertainty only in the aggregate damage. For the macro-level focus of DRMS, an aggregate estimate of the total damage was deemed to be adequate. A second difference is that HEC-FDA also specifies the uncertainty in the first floor elevation of structures. For DRMS, data on first-floor elevation was unavailable and hence the uncertainty in that factor was not considered explicitly; rather, this was considered to be a part of the uncertainty in the depth-percent damage function. A third difference is that the HEC-FDA method combines epistemic and aleatory uncertainties to calculate the aggregate expected damage. In contrast, the DRMS method analyzes and displays the two types of uncertainties separately. The DRMS approach allows an

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assessment of the confidence in the estimated frequency of exceeding different damage levels.

6.3 Assessment of Aleatory Uncertainty

Even if the median depth-damage relationship were to be known with certainty (i.e., it is the correct model), the actual percent damage from the next flood event, and the corresponding repair cost, would still be uncertain. This aleatory uncertainty will be assessed based on experience with, and knowledge of, the accuracy of engineering cost estimates. For this study, the focus will be on estimating the total repair costs of infrastructure assets in a flooded island. Accurate estimates of the repair costs of individual assets would not be required. Because the total repair cost will be the sum of many cost elements corresponding to the different asset classes, the aleatory uncertainty in this sum will be reduced to the extent that the costs of the different asset classes are independent of each other. Specifically, the coefficient of variation in the sum of n independent cost elements is equal to the coefficient of variation of each cost element divided by square root of n . Within a given asset class, it may be conservatively assumed that the repair costs of individual assets are correlated and hence there is no reduction in the coefficient of variation for the total cost for the asset class.

The typical coefficient of variation in the estimates of individual repair cost elements is of the order of 30 to 50 percent. The number of different asset classes in a given island is of the order of 10. Consequently, the coefficient of variation in the total repair cost is assessed to be of the order of 10 to 16 percent. Conservatively, a coefficient of variation of 15 percent may be assumed for the total repair cost. This is comparable to the coefficient of variation of about 12 percent estimated for the New Orleans Katrina damage analysis based on Corps of Engineers previous studies of flood damage reduction. A lognormal distribution will be assumed for the total cost. This is an appropriate distribution for cost, because cost can only assume positive values and the cost distribution is generally skewed to the higher values.

The probability distribution of the total repair cost is based on the expected value and coefficient of variation of the total repair cost for a given scenario of epistemic uncertainty. The probabilities of exceeding different values of the total repair cost can then be calculated using this probability distribution. This analysis may be repeated for different scenarios of epistemic uncertainty. These results, along with the assessed confidence in each epistemic uncertainty scenario, may be used to express confidence levels in the probability of exceeding different values of the total repair cost.

The DRMS procedure for assessing aleatory uncertainty is similar to the one used by the USACE HEC-FDA program in which the uncertainty in the dollar asset value is specified in terms of percent standard deviation (i.e., a coefficient of variation). One difference, as in the case of the epistemic uncertainty, is that HEC-FDA specifies uncertainty separately for three types of asset values (structure, contents, and other), whereas DRMS specifies the uncertainty only in the aggregate value. Another difference, as noted above, is that HEC-FDA combines the epistemic and aleatory uncertainties to calculate the aggregate expected damage, whereas DRMS analyzes and displays the two types of uncertainties separately.

7. Results of Study

7.1 Asset Tables

This TM describes the methodology that was used to estimate damage to Delta infrastructure and the resulting costs and schedule durations needed to repair the inundation damage caused by levee breaches due to the hazards considered in the DRMS study. In this TM, the term “infrastructure” is used to designate all structures and buildings, and their contents. Damage also includes debris removal and environmental clean up costs.

The results of this study are presented in tables of estimated asset damage that include:

- Type and number of assets for each Delta island
- Average depth of inundation of assets for each flooding event
- Estimates of percent damage for selected assets (for which the damage estimate is based on the percent damage times the total cost of asset)
- Estimated cost of damage for each asset type
- Total estimated cost of damage of assets for each island
- Total replacement cost of assets for each island
- Estimated repair times for the various asset types.

Appendix C provides a further description of the information contained in the tables of asset damage. The above information is presented in the tables of asset damage as indicated below (the tables are located after Section 8). Tables 7-1 to 7-3 pertain to current conditions and Tables 7-4 to 7-6 pertain to 2050 conditions.

- Estimate of Asset Cost Damage and Repair Times - Mean Higher High Water (MHHW) – Current (Table 7-1a)
- Estimate Summary of Asset Cost Damage by Island - Mean Higher High Water (MHHW) – Current (Table 7-1b)
- Estimate of Asset Cost Damage and Repair Times - 100-year Flood – Current (Table 7-2a)
- Estimate Summary of Asset Cost Damage by Island - 100-year Flood – Current (Table 7-2b)
- Estimate of Asset Cost Damage by Island (MHHW) - Scour – Current (Table 7-3a)
- Estimate of Asset Cost Damage by Island (100-year Flood) - Scour – Current (Table 7-3b)
- Estimate of Asset Cost Damage and Repair Times - Mean Higher High Water (MHHW) – 2050 (Table 7-4a)
- Estimate Summary of Asset Cost Damage by Island - Mean Higher High Water (MHHW) – 2050 (Table 7-4b)

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- Estimate of Asset Cost Damage and Repair Times - 100-year Flood – 2050 (Table 7-5a)
- Estimate Summary of Asset Cost Damage by Island - 100-year Flood – 2050 (Table 7-5b)
- Estimate of Asset Cost Damage by Island (MHHW) – Scour – 2050 (Table 7-6a)
- Estimate of Asset Cost Damage by Island (100-year Flood) - Scour – 2050 (Table 7-6b)

Scour due to levee breaching is included in the inundation events (i.e., scour of levee is followed by inundation/flooding of an island). The potential scour zones for the Delta islands are shown on Figure 4-2 together with the MHHW and 100-year flood plain limits. This figure indicates the areas around the island perimeters that would be potentially vulnerable to scour damage. Scour holes (2000 feet long x 500 feet wide) could occur anywhere within the island perimeters shown on Figure 4-2.

As stated in Section 4.5, an asset within a scour hole is considered to be destroyed and, therefore, the repair cost is equal to its replacement cost. These repair costs are treated as incremental or differential costs that are added to the total cost of repair without scour to obtain the total cost of repair. Thus, the repair cost within a scour zone is equal to the difference between the total replacement cost and the inundation repair cost. The total cost of repair with scour represents the total cost of repair of the assets. The repair costs due to scour in a 100-year flood event would be less than the scour repair costs for an MHHW event because the *inundation* repair costs for the former event account for a greater proportion of the total repair costs than would the latter event.

As described in Section 4, the above asset tables were prepared for up to five island failures. Multiple island failures have been addressed; longer response and repair times and greater costs would result from multiple island failures. To account for multiple island failures, the linear cost and repair time scaling factors in Table 7-7 would be applied to the data in the above asset tables.

Table 7-7 Cost and Repair Time Scaling Factors for Multiple Island Failures

Number of Island Failures	Cost Scaling Factors ^a	Repair Time Scaling Factors ^a (for point assets ^b)
1 to 5	1.0	1.0
10	1.2	1.4
20	1.6	2.2
30	2.0	3.0

^a The cost and repair time scaling factors are applied to more than five island failures.

^b See Section 4.4.2 for estimated repair times for linear assets in multiple island failures.

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7.2 Summary

The total estimated replacement costs for infrastructure assets within the Delta are summarized in Table 7-8 for the current (2005) and 2050 conditions, for MHHW and 100 year inundation levels. This table accounts for infrastructure assets that could be damaged as a result of levee breaching and island flooding (see Section 1.2). The costs are based on the results presented in Tables 7-1, 7-2, 7-4 and 7-5.

Table 7-8 Comparison of Total Replacement Costs of Delta Infrastructure - Current and 2050^a

Inundation Level	Current (2005) ^c	2050	Cost Ratio: 2050/Current
Within Mean Higher High Water (MHHW) Limits ^b	\$6.7 billion	\$8.5 billion ^e	1.3
Within 100-year Flood Limits ^{b,c}	\$56.3 billion	\$67.1 billion ^e	1.2

^a Costs in this table are for infrastructure assets and their contents that could be damaged as a result of levee breaching and island flooding.

^b See Section 4.1.2 and Figure 4-1 for limits of inundation.

^c Flood plain limits were developed from FEMA Flood Insurance Rate Maps.

^d Costs are in 2005 dollars.

^e Costs are in 2005 dollars; not escalated to 2050.

As indicated in Table 7-8, the total replacement cost of assets within the 100-year flood limits significantly exceeds (about 8 times) these costs for assets within the MHHW limits. The reason for this large difference is explained by referring to Figure 4-1. This figure shows that the 100-year flood event has the potential to inundate major urban areas such as Sacramento and Stockton that have a large inventory of infrastructure assets. However, the MHHW limits do not extend to these large urban areas. Smaller towns and rural/agricultural areas mainly fall within the MHHW limits. The largest differences between damages for the 100-year flood event and other events would be for infrastructure that is located near the edge of the floodplain in urban areas (areas with topographic relief).

Table 7-8 also indicates that over the next 50 years, the total replacement cost of assets could increase by about 20 to 30 percent within the MHHW limits and the 100-year flood plain limits. Likewise, the overall damage repair costs of assets as a result of levee failure are also expected to increase over the next 50 years due to the (1) increase in the amount of infrastructure assets as a result of population growth, (2) Delta water level rise due to climate change, and corresponding increase in MHHW and 100-year flood levels, and (3) decrease in island elevation levels due to subsidence. The increase in water levels, coupled with the decreasing island elevations, would increase the amount of inundation of Delta assets in the future. The damage would therefore increase, resulting in greater future repair costs and repair times.

The repair costs for infrastructure assets will be based on the number of island failures and resulting inundation, and the repair costs will vary from island to island. For both current and 2050 conditions, the overall results of the repair and replacement costs presented in the asset tables indicate that the repair costs due to inundation could be on

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the order of 30 percent (for MHHW) and 50 percent (for the 100-year flood) of the asset replacement costs, considering all Delta islands and tracts.

7.3 Limitations

As stated in Section 1.2, we consider damage to infrastructure assets that could result from levee breaching and island flooding. Infrastructure assets that would not be damaged by levee failure (e.g., pumping plants and power plants) are beyond the scope of the TM.

As stated in Section 3, because some asset types lack attribute information, it was not always possible to estimate asset costs from the GIS data. In these cases, there is insufficient definition of quantitative attributes to evaluate reliable replacement and repair costs and assumptions had to be made so that damage loss could be estimated. Also, some assets were not available in the GIS database. Further characterization of the Delta infrastructure assets would reduce the uncertainty in the damage estimates.

Because of the lack of information on repair times (due to the absence of historic experience), especially for multi-island failures, judgment was used to estimate repair times.

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Tables

Table 7-1a: Estimate of Asset Cost Damage and Repair Times- Mean Higher High Water - (MHHW)

Total Asset Value: \$6.7 Billion

1	2	3	4	5	6	7	8	9	10	11
Island Name	Asset Type	Inventory Unit	GIS Quantity (current)	Avg Inundation Depth (ft)	Percent Damage	Total Asset Value (Structure + Contents) (\$1,000)	Total Inundation Repair Costs (Structure + Contents + Debris) (\$1000)	Per Island Inundation Repair Costs (\$1000)	Per Island Asset Value (\$1000)	Repair Time (Months)
Bacon_Island	Delta Roads PBSJ Minor Roads	Length (ft)	37,654	18	25.0	7,531	2,071	31,586	43,916	6
	NG Pipelines DWR	Length (ft)	28,288	18	0.0	8,628	0			0
	PBSJ Gas Oil Wells	Count	8	18	-	0	0			0
	Residential - Institutional Dormitory	Count	5	18	100.0	27,758	29,515			24
Bethel_Island	Boatlaunch	Count	3	0	0.0	300	0	148,408	254,118	0
	Delta Roads PBSJ Minor Roads	Length (ft)	157,050	10	25.0	31,410	8,638			6
	NG Pipelines DWR	Length (ft)	23,383	10	0.0	4,443	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	722	10	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	24	8	-	0	0			0
	Residential - Duplex	Count	7	10	49.5	3,468	2,073			24
	Residential - Manufactured Housing	Count	451	10	100.0	23,078	23,947			24
	Residential - Single Family Dwelling	Count	693	10	48.6	190,205	112,458			23
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	13	100.0	1,215	1,292			24
	Solid Waste Facilities	Count	1	0	0.0	0	0			0
	Utilities ESRI	Count	1	6	-	0	0			0
	water_trans	Count	2	6	0.0	0	0			0
Bishop_Tract	Boatlaunch	Count	1	0	0.0	100	0	2,853	18,249	0
	Delta Roads PBSJ Minor Roads	Length (ft)	38,810	7	25.0	7,762	2,135			6
	PBSJ Gas Oil Wells	Count	1	0	-	0	0			0
	PBSJ Substation	Count	1	0	0.0	1,000	0			0
	Residential - Single Family Dwelling	Count	5	7	39.1	1,499	719			19
	Transmission Line	Length (ft)	32,039	7	-	7,888	0			0
Bixler_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	150	2	25.0	30	8	155	636	6
	PBSJ Gas Oil Production Fields	Area (Acres)	81	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	0	-	0	0			0
	Residential - Single Family Dwelling	Count	2	2	20.8	606	146			10
Bouldin_Island	air_trans	Count	1	19	-	0	0	14,359	25,897	0
	Commercial- Professional/ Technical Services	Count	1	20	100.0	7,584	8,342			18
	Commercial- Retail Trade	Count	1	20	100.0	1,188	1,307			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,505	20	25.0	497	137			6
	Delta Roads PBSJ Minor Roads	Length (ft)	43,282	20	25.0	8,656	2,381			6
	Hwy HAZUS SDURS	Length (ft)	24,159	20	25.0	7,972	2,192			3
	PBSJ Gas Oil Production Fields	Area (Acres)	103	20	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	17	19	-	0	0			0
	Utilities ESRI	Count	1	0	-	0	0			0
Brack_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	31,811	12	25.0	6,362	1,750	2,830	12,771	6
	NG Pipelines DWR	Length (ft)	23,403	12	0.0	5,383	0			0
	PBSJ Gas Oil Wells	Count	19	11	-	0	0			0
	Residential - Manufactured Housing	Count	8	12	100.0	399	414			24
	Residential - Single Family Dwelling	Count	3	12	100.0	627	667			24
Bradford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	57,920	14	25.0	11,584	3,186			6
	NG Pipelines DWR	Length (ft)	7,466	14	0.0	2,165	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	896	14	0.0	0	0			0

	PBSJ Gas Oil Wells	Count	16	13	-	0	0				0
	Residential - Duplex	Count	1	14	100.0	219	233				24
	Residential - Manufactured Housing	Count	9	14	100.0	444	461				24
	Residential - Single Family Dwelling	Count	27	14	100.0	7,218	7,675	11,554	21,630		24
Brannan-Andrus Island	air trans	Count	1	0	-	0	0				0
	Boatlaunch	Count	8	3	100.0	800	880				0
	Commercial - Entertainment and Recreation	Count	1	18	100.0	2,992	3,291				0
	Commercial- Professional/ Technical Services	Count	1	18	100.0	7,632	8,395				18
	Commercial- Retail Trade	Count	1	18	100.0	5,476	6,024				18
	Delta Roads PBSJ Major Roads	Length (ft)	28,339	18	25.0	8,502	2,338				6
	Delta Roads PBSJ Minor Roads	Length (ft)	264,098	18	25.0	52,820	14,525				6
	hc hospitals	Count	1	0	0.0	0	0				0
	Hwy Bridge HAZUS SDURS	Length (ft)	2	2	0.0	4,000	0				0
	Hwy HAZUS SDURS	Length (ft)	55,612	18	25.0	18,352	5,047				3
	NG Pipelines DWR	Length (ft)	75,805	18	0.0	17,814	0				0
	NG Wells DWR Not in PBSJ	Count	2	25	-	0	0				0
	PBSJ Gas Oil Production Fields	Area (Acres)	9,088	18	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	157	13	-	0	0				0
	Residential - Duplex	Count	6	18	100.0	3,909	4,157				24
	Residential - Manufactured Housing	Count	297	18	100.0	15,386	15,965				24
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	18	100.0	3,579	3,806				24
	Residential - Single Family Dwelling	Count	305	18	100.0	65,780	69,946				24
	Residential - Triplex-Quads	Count	3	18	100.0	3,129	3,327				24
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	18	100.0	702	612				18
	Solid Waste Facilities	Count	1	15	25.0	0	0				0
	Transmission Line	Length (ft)	19,080	18	-	4,698	0				0
	water trans	Count	2	6	0.0	0	0	138,312	215,569		0
Browns Island	Hazmat HAZUS SDURS	Count	2	0	-	0	0				0
	Solid Waste Facilities	Count	1	0	0.0	0	0	0	0		0
Byron_Tract 1	Delta Roads PBSJ Minor Roads	Length (ft)	18,586	10	25.0	3,717	1,022				6
	Hwy HAZUS SDURS	Length (ft)	5,458	10	25.0	1,801	495				3
	PBSJ Gas Oil Wells	Count	2	0	-	0	0				0
	Residential - Manufactured Housing	Count	2	10	100.0	138	143				24
	Residential - Single Family Dwelling	Count	9	10	48.6	2,103	1,243				23
	Sewage Treat	Count	1	12	15.0	100,000	16,500				6
	Transmission Line	Length (ft)	29,816	10	-	9,600	0	19,404	117,359		0
Byron_Tract 2	bridges not in HAZUS	Count	5	2	0.0	5,000	0				0
	Commercial- Professional/ Technical Services	Count	1	5	35.0	946	583				13
	Commercial- Retail Trade	Count	1	5	20.0	204	109				7
	Delta Roads PBSJ Minor Roads	Length (ft)	12,532	5	25.0	2,506	689				6
	Residential - Manufactured Housing	Count	2	5	100.0	95	96				24
	Residential - Single Family Dwelling	Count	16	5	32.6	4,956	1,960				16
	Transmission Line	Length (ft)	25,356	5	-	8,164	0	3,436	21,871		0
Cache_Haas_Tract 1	Delta Roads PBSJ Minor Roads	Length (ft)	79,381	2	25.0	15,876	4,366				6
	NG Pipelines DWR	Length (ft)	5,755	2	0.0	1,094	0				0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,149	2	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	18	1	-	0	0				0
	Residential - Single Family Dwelling	Count	1	2	20.8	174	42				10
	Transmission Line	Length (ft)	13,005	2	-	4,187	0	4,408	21,331		0
Cache_Haas_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	9,202	3	25.0	1,840	506				6
	Hwy HAZUS SDURS	Length (ft)	2,391	3	25.0	789	217				3
	PBSJ Gas Oil Production Fields	Area (Acres)	602	3	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	20	4	-	0	0				0
	Residential - Manufactured Housing	Count	1	3	100.0	30	29				24
	Residential - Single Family Dwelling	Count	5	3	25.8	1,373	415				12
	Transmission Line	Length (ft)	567	3	-	183	0	1,167	4,215		0
Canal Ranch	Commercial- Professional/ Technical Services	Count	1	9	44.0	2,862	1,952				16

	Commercial- Retail Trade	Count	1	9	30.0	1,878	1,136			11
	Delta Roads PBSJ Minor Roads	Length (ft)	17,180	9	25.0	3,436	945			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	1,085	9	0.0	202	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	296	9	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	11	11	-	0	0			0
	Residential - Manufactured Housing	Count	3	9	100.0	167	172			24
	Residential - Single Family Dwelling	Count	1	9	43.6	263	142	4,347	10,807	21
Chippis Island	PBSJ Gas Oil Wells	Count	2	2	-	0	0	0	0	0
Clifton Court Forebay Water	Boatlaunch	Count	1	0	0.0	100	0			0
	Commercial- Professional/ Technical Services	Count	1	13	100.0	384	380			18
	Commercial- Retail Trade	Count	1	13	47.0	84	59			17
	Residential - Single Family Dwelling	Count	2	0	12.5	504	65			6
	Transmission Line	Length (ft)	9,733	0	-	3,134	0	504	4,206	0
Coney Island	Residential - Manufactured Housing	Count	10	10	100.0	507	526			24
	Residential - Single Family Dwelling	Count	66	10	48.6	21,414	12,661	13,187	21,921	23
Deadhorse Island	NG Pipelines DWR	Length (ft)	3,862	11	0.0	734	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	210	11	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	9	-	0	0			0
	Residential - Single Family Dwelling	Count	1	11	48.6	255	151			23
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	11	49.5	9	5	156	998	24
Decker Island	NG Pipelines DWR	Length (ft)	8,084	2	0.0	1,536	0	0	1,536	0
Egbert Tract	Delta Roads PBSJ Minor Roads	Length (ft)	56,448	6	25.0	11,290	3,105			6
	NG Pipelines DWR	Length (ft)	23,269	6	0.0	5,585	0			0
	NG Wells DWR Not in PBSJ	Count	3	3	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,019	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	67	4	-	0	0			0
	Residential - Manufactured Housing	Count	1	6	100.0	39	40			24
	Residential - Single Family Dwelling	Count	7	6	32.6	1,815	718			16
	Transmission Line	Length (ft)	6,914	6	-	2,226	0	3,862	20,954	0
Elk Grove 1	Hwy HAZUS SDURS	Length (ft)	763	3	25.0	252	69	69	252	3
Empire Tract	Boatlaunch	Count	1	22	100.0	100	110			0
	Delta Roads PBSJ Minor Roads	Length (ft)	44,263	21	25.0	8,853	2,434			6
	PBSJ Gas Oil Wells	Count	5	18	-	0	0			0
	Residential - Manufactured Housing	Count	6	21	100.0	326	338			24
	Residential - Single Family Dwelling	Count	3	21	100.0	512	544	3,426	9,790	24
Fabian Tract	Boatlaunch	Count	1	0	0.0	100	0			0
	Commercial- Retail Trade	Count	1	4	16.0	298	144			6
	Delta Roads PBSJ Minor Roads	Length (ft)	44,960	4	25.0	8,992	2,473			6
	NG Pipelines DWR	Length (ft)	1,817	4	0.0	345	0			0
	PBSJ Gas Oil Wells	Count	4	3	-	0	0			0
	Residential - Duplex	Count	3	4	25.5	1,124	363			12
	Residential - Institutional Dormitory	Count	2	4	14.0	8,421	2,007			7
	Residential - Manufactured Housing	Count	10	4	100.0	518	512			24
	Residential - Single Family Dwelling	Count	16	4	25.8	3,314	1,075			12
	Transmission Line	Length (ft)	24,537	4	-	6,041	0	6,574	29,152	0
Fay Island	Delta Roads PBSJ Minor Roads	Length (ft)	112	9	25.0	22	6	6	22	6
Glanville Tract	Delta Roads PBSJ Major Roads	Length (ft)	7,873	3	25.0	2,598	714			6
	Delta Roads PBSJ Minor Roads	Length (ft)	5,303	3	25.0	1,061	292			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	8	0.0	2,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	88	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	10	3	-	0	0			0
	Residential - Manufactured Housing	Count	1	3	100.0	35	33			24
	Residential - Single Family Dwelling	Count	3	3	25.8	521	157			12
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	3	25.5	17	5	1,202	6,230	12
Grand Island	Agriculture	Count	1	13	100.0	8,486	8,028			18
	Boatlaunch	Count	1	0	0.0	100	0			0

	Commercial - Banks	Count	1	13	37.0	1,084	817				13
	Commercial- Professional/ Technical Services	Count	1	19	100.0	6,378	7,016				18
	Commercial- Retail Trade	Count	1	19	100.0	6,638	7,302				18
	Delta Roads PBSJ Major Roads	Length (ft)	3,302	13	25.0	1,089	300				6
	Delta Roads PBSJ Minor Roads	Length (ft)	169,392	13	25.0	33,878	9,317				6
	Hwy Bridge HAZUS SDURS	Length (ft)	2	0	0.0	4,000	0				0
	Hwy HAZUS SDURS	Length (ft)	75,585	13	25.0	24,943	6,859				3
	Industrial - Light	Count	7	13	48.0	39,675	26,186				17
	NG Pipelines DWR	Length (ft)	11,589	13	0.0	2,202	0				0
	NG Wells DWR Not in PBSJ	Count	1	10	-	0	0				0
	PBSJ Cell Towers	Count	1	0	-	250	0				0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,815	13	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	96	12	-	0	0				0
	PBSJ Substation	Count	1	16	25.0	1,000	275				0
	Residential - Duplex	Count	5	13	100.0	2,526	2,686				24
	Residential - Institutional Dormitory	Count	1	13	38.0	5,649	3,049				18
	Residential - Manufactured Housing	Count	39	13	100.0	2,070	2,148				24
	Residential - Single Family Dwelling	Count	366	13	100.0	97,205	103,361				24
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	19	100.0	3,597	3,825				24
	Schools HAZUS SDURS	Count	1	15	45.0	1,180	837				16
Hastings_Tract 1	Transmission Line	Length (ft)	48,859	13	-	12,030	0	182,004	253,980		0
	Commercial- Retail Trade	Count	1	1	1.0	6	0	0	6		
	PBSJ Gas Oil Production Fields	Area (Acres)	46	1	0.0	0	0				
Hastings_Tract 2	Commercial- Retail Trade	Count	1	4	16.0	162	76				
	Delta Roads PBSJ Minor Roads	Length (ft)	27,793	4	25.0	5,559	1,529				6
	PBSJ Gas Oil Production Fields	Area (Acres)	464	4	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	37	3	-	0	0				0
	Residential - Manufactured Housing	Count	1	4	100.0	59	57				24
	Residential - Single Family Dwelling	Count	10	4	25.8	2,700	817				12
Holland_Land	Transmission Line	Length (ft)	11,505	4	-	3,704	0	2,478	12,183		0
	Hwy HAZUS SDURS	Length (ft)	68,170	3	25.0	22,496	6,186	6,186	22,496		3
	Delta Roads PBSJ Minor Roads	Length (ft)	52,160	14	25.0	10,432	2,869	6,432	15,787		6
Holland_Tract	Hwy Bridge HAZUS SDURS	Length (ft)	1	8	0.0	2,000	0				0
	PBSJ Gas Oil Wells	Count	11	12	-	0	0				0
	Residential - Manufactured Housing	Count	4	14	100.0	192	199				24
Honker_Bay_Club	Residential - Single Family Dwelling	Count	12	14	100.0	3,164	3,364				24
	NG Pipelines DWR	Length (ft)	4,395	3	0.0	835	0	65	2,111		0
Hotchkiss_Tract 1	PBSJ Gas Oil Production Fields	Area (Acres)	46	3	0.0	0	0				0
	Petr Pipelines DWR	Length (ft)	4,803	3	0.0	1,009	0				0
	Residential - Single Family Dwelling	Count	1	3	20.8	267	65				10
Hotchkiss_Tract 1	Boatlaunch	Count	1	5	100.0	100	110	48,771	125,411		0
	Commercial- Professional/ Technical Services	Count	1	10	47.0	3,026	2,114				17
	Commercial- Retail Trade	Count	1	10	34.0	654	410				12
	Delta Roads PBSJ Minor Roads	Length (ft)	53,990	6	25.0	10,798	2,969				6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0				0
	NG Pipelines DWR	Length (ft)	21,048	6	0.0	3,999	0				0
	PBSJ Gas Oil Production Fields	Area (Acres)	846	6	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	25	5	-	0	0				0
	Residential - Duplex	Count	6	6	38.5	2,478	1,134				18
	Residential - Manufactured Housing	Count	95	6	100.0	5,007	5,104				24
	Residential - Single Family Dwelling	Count	299	6	37.0	81,743	36,506				18
	Residential - Triplex-Quads	Count	2	6	38.5	926	424				18
	Transmission Line	Length (ft)	45,599	6	-	14,681	0				0
Hotchkiss_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	3,345	6	25.0	669	184	184	1,119		6
	NG Pipelines DWR	Length (ft)	2,370	6	0.0	450	0				0
	PBSJ Gas Oil Production Fields	Area (Acres)	172	6	0.0	0	0				0
	PBSJ_Gas_Oil_Wells	Count	2	5	-	0	0				0

Jersey_Island	Delta Roads PBSJ Minor Roads	Length (ft)	37,573	14	25.0	7,515	2,067			6
	NG Pipelines DWR	Length (ft)	11,881	14	0.0	7,426	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	630	14	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	15	11	-	0	0			0
	Residential - Manufactured Housing	Count	1	14	100.0	65	67			24
	Residential - Single Family Dwelling	Count	4	14	100.0	1,065	1,132			24
	Solid Waste Facilities	Count	1	20	25.0	0	0			0
	Transmission Line	Length (ft)	26,539	14	-	8,545	0	3,266	24,614	0
Jones_Tract-Upper_and_Low	bridges not in HAZUS	Count	1	0	0.0	1,000	0			0
	Commercial- Professional/ Technical Services	Count	1	18	100.0	478	526			18
	Commercial- Retail Trade	Count	1	18	100.0	88	97			18
	Delta Roads PBSJ Minor Roads	Length (ft)	122,829	14	25.0	24,566	6,756			6
	gas pipeline kinder morgan LS 9	Length (ft)	27,507	14	0.0	5,776	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	1	12	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	15,032	14	0.0	24,202	0			0
	NG Storage	Count	1	0	0.0	0	0			0
	PBSJ Cell Towers	Count	2	0	-	500	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	7,820	14	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	6,859	15	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	82,207	14	-	411,035	34,363			1
	Rail Bridge HAZUS SDURS	Count	1	9	100.0	1,000	0			1
	Rail HAZUS SDURS	Length (ft)	28,472	5	100.0	8,115	8,800			1
	Residential - Duplex	Count	2	2	15.5	872	155			7
	Residential - Institutional Dormitory	Count	4	16	47.0	25,881	15,924			23
	Residential - Manufactured Housing	Count	9	14	100.0	401	416			24
	Residential - Single Family Dwelling	Count	13	14	100.0	2,561	2,723	69,757	508,474	24
King_Island	Boatlaunch	Count	1	14	100.0	100	110			0
	Commercial - Entertainment and Recreation	Count	1	15	45.0	1,772	1,413			0
	Commercial- Professional/ Technical Services	Count	1	15	100.0	1,866	2,053			18
	Commercial- Retail Trade	Count	1	15	100.0	13,544	14,898			18
	Delta Roads PBSJ Minor Roads	Length (ft)	44,571	15	25.0	8,914	2,451			6
	Hwy Bridge HAZUS SDURS	Length (ft)	2	14	0.0	4,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	178	15	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	10	14	-	0	0			0
	Residential - Duplex	Count	1	15	100.0	281	298			24
	Residential - Institutional Dormitory	Count	1	15	42.0	5,334	3,067			20
	Residential - Manufactured Housing	Count	63	15	100.0	3,200	3,320			24
	Residential - Single Family Dwelling	Count	25	15	100.0	5,039	5,358			24
	water trans	Count	1	20	0.0	0	0	32,968	44,049	0
Libby_McNeil_Tract 1	Commercial- Professional/ Technical Services	Count	1	4	22.0	1,110	556			8
	Commercial- Retail Trade	Count	1	4	16.0	1,336	625			6
	Communication HAZUS SDURS	Count	1	0	0.0	118	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	5,110	4	25.0	1,686	464			6
	Delta Roads PBSJ Minor Roads	Length (ft)	10,178	4	25.0	2,036	560			6
	PBSJ Gas Oil Production Fields	Area (Acres)	145	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	7	2	-	0	0			0
	Residential - Duplex	Count	4	4	25.5	1,746	525			12
	Residential - Manufactured Housing	Count	2	4	100.0	122	119			24
Libby_McNeil_Tract 2	Residential - Single Family Dwelling	Count	41	4	25.8	11,106	3,360	6,207	19,259	12
	Boatlaunch	Count	1	0	0.0	100	0			0
	Commercial- Retail Trade	Count	1	1	1.0	2	0			0
	Delta Roads PBSJ Minor Roads	Length (ft)	345	1	25.0	69	19			6
	PBSJ Gas Oil Production Fields	Area (Acres)	43	1	0.0	0	0			0
Liberte Island	Residential - Single Family Dwelling	Count	4	1	12.5	1,032	132	152	1,203	6
	Delta Roads PBSJ Minor Roads	Length (ft)	35,789	1	25.0	7,158	1,968			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	1	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	28,636	1	0.0	5,441	0			0

	PBSJ Gas Oil Production Fields	Area (Acres)	743	1	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	23	1	-	0	0	1,968	14,599	0
Lincoln_Village_Tract	Hwy HAZUS SDURS	Length (ft)	56,501	11	25.0	18,645	5,127			3
	Residential - Single Family Dwelling	Count	1	0	12.5	234	30			6
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	11	100.0	17	18			24
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	11	100.0	6	6	5,181	18,902	24
Lisbon_District	Delta Roads PBSJ Minor Roads	Length (ft)	5,001	3	25.0	1,000	275			6
	PBSJ Gas Oil Production Fields	Area (Acres)	126	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	8	2	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	9,382	3	25.0	2,674	735			1
	Residential - Duplex	Count	1	3	25.5	119	36			12
	Residential - Single Family Dwelling	Count	21	3	25.8	5,736	1,735			12
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	3	25.5	182	55			12
	Transmission Line	Length (ft)	7,609	3	-	1,873	0	2,836	11,583	0
Little Holland Tract	PBSJ Gas Oil Production Fields	Area (Acres)	88	1	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	1	-	0	0	0	0	0
Little_Egbert□_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	16,690	10	25.0	3,338	918			6
	Hwy HAZUS SDURS	Length (ft)	316	10	25.0	104	29			3
	NG Pipelines DWR	Length (ft)	10,821	10	0.0	2,597	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	652	10	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	24	10	-	0	0			0
	Residential - Manufactured Housing	Count	1	10	100.0	27	28			24
	Residential - Single Family Dwelling	Count	5	10	48.6	1,224	724	1,698	7,290	23
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	4,657	6	25.0	931	256			6
	PBSJ Gas Oil Wells	Count	1	0	-	0	0			0
	Residential - Manufactured Housing	Count	1	6	100.0	30	31			24
	Residential - Single Family Dwelling	Count	1	6	37.0	188	84	370	1,149	18
Mandeville_Island	Delta Roads PBSJ Minor Roads	Length (ft)	26,062	20	25.0	5,212	1,433			6
	PBSJ Gas Oil Wells	Count	10	23	-	0	0	1,433	5,212	0
McCormack_Williamson_Tract	Communication HAZUS SDURS	Count	2	0	0.0	236	0			0
	Delta Roads PBSJ Minor Roads	Length (ft)	9,930	3	25.0	1,986	546			6
	NG Pipelines DWR	Length (ft)	4,699	3	0.0	893	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	884	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	18	3	-	0	0	546	3,115	0
McDonald_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	67,360	20	25.0	13,472	3,705			6
	NG Pipelines DWR	Length (ft)	20,905	20	0.0	6,376	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,056	20	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	105	15	-	0	0			0
	Residential - Institutional Dormitory	Count	3	20	100.0	16,398	17,437	21,141	36,246	24
McMullin_Ranch-River_Juncti	Hwy HAZUS SDURS	Length (ft)	23,053	4	25.0	7,607	2,092	2,092	7,607	3
Medford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,313	16	25.0	5,663	1,557			6
	Residential - Institutional Dormitory	Count	1	16	100.0	2,897	3,080	4,637	8,559	24
Merritt Island	Commercial- Professional/ Technical Services	Count	1	3	22.0	356	164			8
	Commercial- Retail Trade	Count	1	3	16.0	78	33			6
	Delta Roads PBSJ Major Roads	Length (ft)	2,454	3	25.0	810	223			6
	Delta Roads PBSJ Minor Roads	Length (ft)	37,786	3	25.0	7,557	2,078			6
	PBSJ Gas Oil Production Fields	Area (Acres)	70	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	9	2	-	0	0			0
	Residential - Manufactured Housing	Count	2	3	100.0	146	141			24
	Residential - Single Family Dwelling	Count	40	3	25.8	10,787	3,263			12
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	3	25.5	99	30	5,932	19,832	12
Middle_Roberts_Island	Boatlaunch	Count	3	16	100.0	300	330			0
	bridges not in HAZUS	Count	1	8	0.0	1,000	0			0
	Commercial - Personal and Repair Services	Count	1	9	32.0	1,226	755			12
	Commercial- Professional/ Technical Services	Count	1	13	100.0	716	709			18
	Commercial- Retail Trade	Count	1	13	47.0	566	395			17
	Dams HAZUS SDURS	Count	1	1	0.0	0	0			0

	Delta Roads PBSJ Major Roads	Length (ft)	23,425	9	25.0	7,730	2,126			6
	Delta Roads PBSJ Minor Roads	Length (ft)	288,290	9	25.0	57,658	15,856			6
	gas pipeline kinder morgan LS 9	Length (ft)	24,055	9	0.0	5,052	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	1	3	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	59,509	9	0.0	11,307	0			0
	NG Wells DWR Not in PBSJ	Count	1	0	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	7,820	9	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	6,859	9	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	66,109	9	0	330,544	0			0
	Petr Pipelines DWR	Length (ft)	9,151	12	0.0	1,922	0			0
	Rail HAZUS SDURS	Length (ft)	27,701	9	25.0	7,895	2,171			1
	Residential - Duplex	Count	8	5	28.5	3,395	1,170			14
	Residential - Institutional Dormitory	Count	6	2	7.0	36,285	4,178			3
	Residential - Manufactured Housing	Count	37	9	100.0	1,889	1,953			24
	Residential - Single Family Dwelling	Count	135	8	39.1	31,622	15,171			19
	Schools HAZUS SDURS	Count	1	13	33.0	1,180	759			12
	Solid Waste Facilities	Count	1	1	0.0	0	0			0
	Transmission Line	Length (ft)	164,314	9	-	40,456	0	45,573	542,741	0
Netherlands 2	air trans	Count	1	0	-	0	0			0
	Commercial- Professional/ Technical Services	Count	1	3	22.0	276	138			8
	Commercial- Retail Trade	Count	1	3	16.0	1,354	633			6
	Delta Roads PBSJ Major Roads	Length (ft)	12,559	3	25.0	4,144	1,140			6
	Delta Roads PBSJ Minor Roads	Length (ft)	269,393	3	25.0	53,879	14,817			6
	Fire Stations HAZUS SDURS	Count	1	0	0.0	1,770	0			0
	hc ambulatory	Count	1	3	12.0	0	0			4
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	613	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	70	2	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	2,051	3	25.0	584	161			1
	Residential - Institutional Dormitory	Count	1	3	14.0	6,960	1,506			7
	Residential - Manufactured Housing	Count	5	3	100.0	365	357			24
	Residential - Single Family Dwelling	Count	171	3	25.8	44,922	13,589			12
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	3	25.5	833	250			12
	Solid Waste Facilities	Count	2	0	0.0	0	0	32,590	117,086	0
New_Hope_Tract	Agriculture	Count	1	5	19.0	3,606	1,567			7
	Boatlaunch	Count	2	1	100.0	200	220			0
	Commercial- Professional/ Technical Services	Count	1	5	28.0	640	363			10
	Commercial- Retail Trade	Count	1	5	18.0	2,096	1,072			6
	Delta Roads PBSJ Major Roads	Length (ft)	13,318	5	25.0	4,395	1,209			6
	Delta Roads PBSJ Minor Roads	Length (ft)	49,541	5	25.0	9,908	2,725			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	30,822	5	0.0	5,856	0			0
	PBSJ Cell Towers	Count	1	0	-	250	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,678	5	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	56	3	-	0	0			0
	Residential - Manufactured Housing	Count	75	5	100.0	3,875	3,878			24
	Residential - Single Family Dwelling	Count	31	5	29.3	6,419	2,248			14
	water trans	Count	1	1	0.0	0	0	13,281	39,244	0
Orwood_Tract	Commercial- Professional/ Technical Services	Count	1	16	100.0	740	814			18
	Commercial- Retail Trade	Count	1	16	100.0	50	55			18
	Delta Roads PBSJ Minor Roads	Length (ft)	24,362	12	25.0	4,872	1,340			6
	gas pipeline kinder morgan LS 9	Length (ft)	14,840	12	0.0	3,116	0			0
	NG Pipelines DWR	Length (ft)	6,497	12	0.0	1,819	0			0
	PBSJ Gas Oil Wells	Count	14,840	15	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	40,546	12	-	202,729	16,948			1
	Residential - Manufactured Housing	Count	1	12	100.0	47	48			24
	Residential - Single Family Dwelling	Count	83	9	46.6	31,421	17,725			22

	Transmission Line	Length (ft)	7,820	5	-	2,518	0	36,930	247,312	0
Palm_Tract	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	24,441	14	25.0	4,888	1,344			6
	NG_Pipelines_DWR	Length (ft)	27,094	14	0.0	7,586	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	101	14	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	3	14	-	0	0			0
	Rail_HAZUS_SDURS	Length (ft)	12,632	14	25.0	3,600	990			1
	Residential - Manufactured Housing	Count	2	14	100.0	102	106			24
	Residential - Single Family Dwelling	Count	13	14	100.0	4,263	4,533			24
	Transmission Line	Length (ft)	6,595	14	-	2,123	0	6,973	22,563	0
Peter Pocket	Hwy_HAZUS_SDURS	Length (ft)	5,832	2	25.0	1,924	529			3
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	510	8	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	5	0	-	0	0			0
	Residential - Single Family Dwelling	Count	1	2	16.4	372	68			8
	Transmission Line	Length (ft)	865	2	-	279	0	598	2,575	0
Pico_Naglee_Tract	Commercial- Professional/ Technical Services	Count	1	2	16.0	140	45			6
	Commercial- Retail Trade	Count	1	2	14.0	196	60			5
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	9,806	2	25.0	3,236	890			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	21,528	2	25.0	4,306	1,184			6
	NG_Pipelines_DWR	Length (ft)	14,032	2	0.0	2,666	0			0
	PBSJ_Gas_Oil_Wells	Count	2	2	-	0	0			0
	Residential - Manufactured Housing	Count	4	2	100.0	174	159			24
	Residential - Single Family Dwelling	Count	48	2	20.8	15,164	3,664			10
	Transmission Line	Length (ft)	1,082	2	-	266	0			0
	Utilities_ESRI	Count	1	0	-	0	0	6,002	26,148	0
										0
Pierson_Tract	Commercial - Personal and Repair Services	Count	2	8	25.0	3,140	1,813			9
	Commercial- Professional/ Technical Services	Count	1	8	41.0	2,206	1,468			15
	Commercial- Retail Trade	Count	1	8	26.0	956	557			9
	Communication_HAZUS_SDURS	Count	3	4	100.0	354	389			18
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	14,147	8	25.0	4,669	1,284			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	87,600	8	25.0	17,520	4,818			6
	Fire_Stations_HAZUS_SDURS	Count	1	0	0.0	1,770	0			0
	Hwy_Bridge_HAZUS_SDURS	Length (ft)	2	0	0.0	4,000	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	279	8	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	16	6	-	0	0			0
	Residential - Duplex	Count	2	8	43.0	1,281	651			21
	Residential - Manufactured Housing	Count	14	8	100.0	740	759			24
	Residential - Single Family Dwelling	Count	129	8	39.1	26,844	12,879			19
	Residential - Triplex-Quads	Count	1	8	43.0	491	249			21
	Schools_HAZUS_SDURS	Count	2	0	0.0	2,360	0			0
	Transmission Line	Length (ft)	16,720	8	-	4,117	0	24,869	70,446	0
										6
										5
Pittsburg	Commercial- Professional/ Technical Services	Count	1	2	16.0	88	28			6
	Commercial- Retail Trade	Count	1	2	14.0	18	6			5
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	552	2	25.0	110	30			6
	NG_Pipelines_DWR	Length (ft)	3,073	2	0.0	584	0			0
	PBSJ_Substation	Count	1	1	25.0	1,000	275			0
	Petr_Pipelines_DWR	Length (ft)	3,751	2	0.0	788	0			0
	Ports_HAZUS_SDURS	Count	1	6	0.0	2,572	0			0
	Rail_HAZUS_SDURS	Length (ft)	10,239	2	25.0	2,918	802			1
	Residential - Manufactured Housing	Count	1	2	100.0	44	40			24
	Residential - Single Family Dwelling	Count	28	2	20.8	8,424	2,036			10
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	2	22.5	686	174			11
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	2	22.5	458	116			11
	Transmission Line	Length (ft)	24,176	2	-	5,952	0	3,508	23,642	0
Prospect_Island	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	5,398	3	25.0	1,080	297			6
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	301	3	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	11	1	-	0	0			0
	Residential - Single Family Dwelling	Count	2	3	20.8	707	171			10

	Residential- Multi- Dwellings- 10 to 19 units	Count	1	3	22.5	2	0	468	1,788	11
Quimby_Island	bridges not in HAZUS	Count	1	9	0.0	1,000	0			0
	PBSJ Gas Oil Wells	Count	1	14	-	0	0			0
	Residential - Single Family Dwelling	Count	1	16	100.0	126	134	134	1,126	24
Rindge_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	85,006	18	25.0	17,001	4,675			6
	PBSJ Cell Towers	Count	1	7	-	250	0			0
	PBSJ Gas Oil Wells	Count	14	16	-	0	0			0
	Residential - Duplex	Count	1	18	100.0	287	305			24
	Residential - Manufactured Housing	Count	2	18	100.0	132	137			24
	Residential - Single Family Dwelling	Count	4	18	100.0	846	900	6,017	18,516	24
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	2,927	6	25.0	585	161			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	11	0.0	2,000	0			0
	Hwy HAZUS SDURS	Length (ft)	495	6	25.0	163	45			3
	PBSJ Gas Oil Production Fields	Area (Acres)	0	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	6	-	0	0			0
	Transmission Line	Length (ft)	9,406	6	-	2,316	0	206	5,065	0
Roberts_Island	Boatlaunch	Count	1	0	0.0	100	0			0
	Hwy HAZUS SDURS	Length (ft)	44,694	3	25.0	14,749	4,056	4,056	14,849	3
Rough_and_Ready_Island	air trans	Count	1	0	-	0	0			0
	Commercial - Entertainment and Recreation	Count	1	5	16.0	1,224	626			0
	Commercial - Personal and Repair Services	Count	1	5	19.0	2,282	1,205			7
	Commercial - Wholesale Trade	Count	3	5	16.0	11,204	5,731			6
	Commercial- Professional/ Technical Services	Count	1	5	35.0	452	278			13
	Commercial- Retail Trade	Count	1	5	20.0	1,386	739			7
	Delta Roads PBSJ Major Roads	Length (ft)	8,041	5	25.0	2,654	730			6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,660	5	25.0	12,732	3,501			6
	Hazmat HAZUS SDURS	Count	3	0	-	0	0			0
	Industrial - Heavy	Count	1	5	22.0	3,808	1,726			8
	PBSJ Gas Oil Wells	Count	1	4	-	0	0			0
	Petr Pipelines DWR	Length (ft)	11,907	5	0.0	2,501	0			0
	Rail HAZUS SDURS	Length (ft)	28,932	5	25.0	8,246	2,268			1
	Residential - Duplex	Count	3	5	32.0	912	356			15
	Residential - Manufactured Housing	Count	8	5	100.0	422	427			24
	Residential - Single Family Dwelling	Count	13	5	32.6	2,693	1,065	18,652	50,513	16
	Ryer_Island	Delta Roads PBSJ Major Roads	Length (ft)	1,851	11	25.0	611	168		
Delta Roads PBSJ Minor Roads		Length (ft)	116,873	11	25.0	23,375	6,428			6
Hwy Bridge HAZUS SDURS		Length (ft)	1	0	0.0	2,000	0			0
PBSJ Gas Oil Production Fields		Area (Acres)	412	11	0.0	0	0			0
PBSJ Gas Oil Wells		Count	22	8	-	0	0			0
Residential - Manufactured Housing		Count	7	11	100.0	360	374			24
Residential - Single Family Dwelling		Count	61	11	100.0	16,490	17,534	24,503	42,835	24
Sargent_Barnhart_Tract 2	air trans	Count	1	6	-	0	0			0
	Commercial- Professional/ Technical Services	Count	1	8	44.0	8,908	6,075			16
	Commercial- Retail Trade	Count	1	8	30.0	4,026	2,436			11
	Delta Roads PBSJ Minor Roads	Length (ft)	125,109	8	25.0	25,022	6,881			6
	gas pipeline kinder morgan LS 9	Length (ft)	6,859	8	0.0	1,440	0			0
	hc ambulatory	Count	20	8	20.0	0	0			7
	hc hospitals	Count	1	8	43.0	0	0			15
	hc nursing res	Count	2	8	20.0	0	0			10
	PBSJ Mokelumne Aqueduct	Length (ft)	20,301	8	0	101,504	0			0
	PBSJ Substation	Count	1	12	25.0	1,000	275			0
	Residential - Institutional Dormitory	Count	1	8	18.0	5,612	1,823			9
	Residential - Manufactured Housing	Count	10	8	100.0	795	816			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	5	8	43.0	15,809	8,034			21
	Residential - Single Family Dwelling	Count	1,518	8	39.1	517,566	248,320			19
	Residential - Triplex-Quads	Count	23	8	43.0	9,090	4,620			21
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	8	43.0	1,271	646			21

Sargent_Barnhart_Tract 3	Residential- Multi- Dwellings- 20 to 49 units	Count	1	8	43.0	879	447	280,988	696,608	21
	Schools HAZUS SDURS	Count	1	8	13.0	1,180	617			5
	Transmission Line	Length (ft)	10,183	8	-	2,507	0			0
	Commercial - Entertainment and Recreation	Count	4	0	1.0	6,458	249			0
	Commercial - Personal and Repair Services	Count	1	0	0.0	986	33			0
	Commercial- Professional/ Technical Services	Count	1	0	2.0	3,834	169			1
	Commercial- Retail Trade	Count	1	0	1.0	236	9			0
	Delta Roads PBSJ Minor Roads	Length (ft)	1,225	0	0.0	245	0			0
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	0	13.5	653	89			6
	Residential - Single Family Dwelling	Count	23	0	12.5	7,023	901			6
Schafter-Pintail Tract	Residential - Triplex-Quads	Count	1	0	13.5	210	28	1,502	19,826	6
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	0	13.5	75	10			6
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	0	13.5	107	14			6
	Delta Roads PBSJ Minor Roads	Length (ft)	12,297	6	25.0	2,459	676			6
	PBSJ Gas Oil Wells	Count	1	5	-	0	0			0
Sherman_Island	Residential - Single Family Dwelling	Count	2	6	37.0	621	277	954	3,080	18
	Boatlaunch	Count	3	0	0.0	300	0			0
Shima_Tract	Commercial- Professional/ Technical Services	Count	1	16	100.0	276	304	22,203	114,940	18
	Commercial- Retail Trade	Count	1	16	100.0	960	1,056			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,521	16	25.0	502	138			6
	Delta Roads PBSJ Minor Roads	Length (ft)	87,989	16	25.0	17,598	4,839			6
	Hwy HAZUS SDURS	Length (ft)	38,217	16	25.0	12,611	3,468			3
	NG Pipelines DWR	Length (ft)	145,514	16	0.0	48,020	0			0
	NG Wells DWR Not in PBSJ	Count	1	15	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,082	16	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	60	13	-	0	0			0
	Residential - Duplex	Count	1	16	100.0	645	686			24
	Residential - Manufactured Housing	Count	46	16	100.0	2,366	2,455			24
	Residential - Single Family Dwelling	Count	39	16	100.0	8,109	8,623			24
	Residential - Triplex-Quads	Count	1	16	100.0	485	515			24
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	16	100.0	113	120			24
	Transmission Line	Length (ft)	71,300	16	-	22,956	0			0
Shima_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	4,998	7	25.0	1,000	275	275	7,137	6
	Transmission Line	Length (ft)	24,926	7	-	6,137	0			0
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	1,485	6	25.0	297	82	82	807	6
	PBSJ Gas Oil Production Fields	Area (Acres)	1	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	2	-	0	0			0
	Transmission Line	Length (ft)	2,073	6	-	510	0			0
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Count	1	2	20.8	252	61	61	252	10
SM-123	Delta Roads PBSJ Minor Roads	Length (ft)	6,618	1	25.0	1,324	364	387	3,582	6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	3	0.0	2,000	0			0
	Petr Pipelines DWR	Length (ft)	6	1	0.0	1	0			0
	Residential - Single Family Dwelling	Count	1	1	12.5	180	23			6
	Transmission Line	Length (ft)	312	1	-	77	0			0
SM-124	Commercial- Professional/ Technical Services	Count	1	1	2.0	1,846	132			1
	Commercial- Retail Trade	Count	1	1	1.0	1,306	86			0
	Delta Roads PBSJ Major Roads	Length (ft)	724	1	25.0	239	66			6
	Delta Roads PBSJ Minor Roads	Length (ft)	9,144	1	25.0	1,829	503			6
	NG Pipelines DWR	Length (ft)	1,966	1	0.0	373	0			0
	PBSJ Gas Oil Wells	Count	1	1	-	0	0			0
	Petr Pipelines DWR	Length (ft)	2,637	1	0.0	554	0			0
	Rail HAZUS SDURS	Length (ft)	2,058	1	0.0	587	0			0
	Residential - Duplex	Count	9	1	13.5	4,358	591			6
	Residential - Manufactured Housing	Count	2	1	11.0	75	10			5
	Residential - Single Family Dwelling	Count	135	1	12.5	35,744	4,587			6
	Residential - Triplex-Quads	Count	7	1	13.5	3,320	450			6
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	1	13.5	359	49			6

	Residential- Multi- Dwellings- 20 to 49 units	Count	1	1	13.5	39	5				6
	Sewage Treat	Count	2	1	0.0	175,000	0				0
	Transmission Line	Length (ft)	3,814	1	-	939	0	6,480	226,566		0
SM-132	PBSJ Gas Oil Wells	Count	1	6	-	0	0				0
	Residential - Single Family Dwelling	Count	1	6	37.0	263	117	117	263		18
SM-133	PBSJ Gas Oil Production Fields	Area (Acres)	204	2	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	9	0	-	0	0	0	0		0
SM-134	PBSJ Gas Oil Production Fields	Area (Acres)	1	3	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	1	3	-	0	0	0	0		0
SM-198	Delta Roads PBSJ Minor Roads	Length (ft)	662	6	25.0	132	36				6
	NG Pipelines DWR	Length (ft)	4,303	6	0.0	818	0				0
	PBSJ Gas Oil Wells	Count	3	1	-	0	0				0
	Petr Pipelines DWR	Length (ft)	5,048	6	0.0	1,060	0				0
	Rail HAZUS SDURS	Length (ft)	422	6	25.0	120	33				1
	Residential - Single Family Dwelling	Count	4	6	37.0	1,136	507				18
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	6	38.5	27	12				18
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	6	38.5	29	13	602	3,321		18
SM-199	Communication HAZUS SDURS	Count	1	4	49.0	118	64				18
	Delta Roads PBSJ Minor Roads	Length (ft)	2,663	5	25.0	533	146				6
	Residential - Single Family Dwelling	Count	2	5	32.6	660	261				16
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	5	32.0	15	6				15
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	5	32.0	15	6	483	1,341		15
SM-202	Residential - Single Family Dwelling	Count	1	3	20.8	266	64	64	266		10
SM-39	Delta Roads PBSJ Minor Roads	Length (ft)	7,276	1	25.0	1,455	400				6
	Transmission Line	Length (ft)	2,256	1	-	555	0	400	2,011		0
SM-40	Delta Roads PBSJ Minor Roads	Length (ft)	7,779	2	25.0	1,556	428	428	1,556		6
SM-41	Commercial- Professional/ Technical Services	Count	1	1	2.0	4	1				1
	Commercial- Retail Trade	Count	1	1	1.0	72	9				0
	Delta Roads PBSJ Minor Roads	Length (ft)	217	1	25.0	43	12				6
	Petr Pipelines DWR	Length (ft)	9,239	1	0.0	1,940	0				0
	Rail HAZUS SDURS	Length (ft)	5,522	1	0.0	1,574	0	21	3,633		0
SM-42	PBSJ Substation	Count	1	2	25.0	1,000	275				0
	Transmission Line	Length (ft)	3,061	1	-	754	0	275	1,754		0
SM-43	PBSJ Gas Oil Production Fields	Area (Acres)	94	4	0.0	0	0				0
	PBSJ Gas Oil Wells	Count	6	1	-	0	0				0
	Residential - Single Family Dwelling	Count	1	4	29.3	252	88	88	252		14
SM-44	Delta Roads PBSJ Minor Roads	Length (ft)	8,456	1	25.0	1,691	465				6
	Residential - Single Family Dwelling	Count	3	1	16.4	998	183				8
	Transmission Line	Length (ft)	2,710	1	-	667	0	648	3,356		0
SM-46	Commercial- Retail Trade	Count	1	1	1.0	6	1				0
	Delta Roads PBSJ Minor Roads	Length (ft)	2,339	1	25.0	468	129	129	474		6
SM-47	Solid Waste Facilities	Count	1	1	0.0	0	0	0	0		0
SM-48	Commercial - Entertainment and Recreation	Count	1	1	9.0	1,572	259				0
	Commercial- Professional/ Technical Services	Count	1	1	11.0	1,832	322				4
	Commercial- Retail Trade	Count	2	1	9.0	32,602	5,379				3
	PBSJ Gas Oil Wells	Count	2	2	-	0	0				0
	Petr Pipelines DWR	Length (ft)	21,217	1	0.0	4,455	0				0
	Rail HAZUS SDURS	Length (ft)	10,409	1	25.0	2,966	816	6,777	43,428		1
SM-49	Commercial- Professional/ Technical Services	Count	1	2	11.0	84	19				4
	Commercial- Retail Trade	Count	1	2	9.0	170	36				3
	Delta Roads PBSJ Minor Roads	Length (ft)	2,642	2	25.0	528	145				6
	Petr Pipelines DWR	Length (ft)	2,421	2	0.0	508	0				0
	Rail HAZUS SDURS	Length (ft)	4,397	2	25.0	1,253	345				1
	Residential - Single Family Dwelling	Count	2	2	16.4	728	134	679	3,272		8
SM-51	PBSJ Gas Oil Production Fields	Area (Acres)	2	3	0.0	0	0	0	0		0
SM-52	Commercial- Retail Trade	Count	1	4	16.0	110	51				6

	Delta Roads PBSJ Minor Roads	Length (ft)	1,849	4	25.0	370	102			6
	PBSJ Gas Oil Production Fields	Area (Acres)	169	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	6	4	-	0	0			0
	Residential - Single Family Dwelling	Count	2	4	25.8	455	137			12
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	4	25.5	3	1			12
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	4	25.5	5	1	293	942	12
SM-53	Commercial- Retail Trade	Count	1	0	1.0	28	1			0
	Delta Roads PBSJ Minor Roads	Length (ft)	53	0	0.0	11	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	97	0	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	1	1	-	0	0			0
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	0	13.5	2	0			6
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	0	13.5	2	0	1	42	6
SM-54	Delta Roads PBSJ Minor Roads	Length (ft)	3,304	1	25.0	661	182			6
	PBSJ Gas Oil Wells	Count	3	1	-	0	0			0
	Petr Pipelines DWR	Length (ft)	117	1	0.0	25	0			0
	Rail HAZUS SDURS	Length (ft)	3,031	1	25.0	864	238	419	1,549	1
SM-55	Delta Roads PBSJ Minor Roads	Length (ft)	14,380	5	25.0	2,876	791			6
	NG Pipelines DWR	Length (ft)	4,432	5	0.0	842	0			0
	Petr Pipelines DWR	Length (ft)	4,424	5	0.0	929	0			0
	Residential - Single Family Dwelling	Count	2	5	29.3	566	198	989	5,213	14
SM-56	Delta Roads PBSJ Minor Roads	Length (ft)	5,417	3	25.0	1,083	298			6
	NG Pipelines DWR	Length (ft)	5,028	3	0.0	955	0			0
	PBSJ Gas Oil Wells	Count	2	4	-	0	0			0
	Petr Pipelines DWR	Length (ft)	3,111	3	0.0	653	0			0
	Residential - Single Family Dwelling	Count	3	3	20.8	1,070	258	556	3,761	10
SM-57	Delta Roads PBSJ Minor Roads	Length (ft)	4,563	1	25.0	913	251			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	535	1	0.0	102	0			0
	Transmission Line	Length (ft)	5,895	1	-	1,451	0	251	4,466	0
SM-58	Delta Roads PBSJ Minor Roads	Length (ft)	3,840	4	25.0	768	211	211	768	6
SM-59	Delta Roads PBSJ Major Roads	Length (ft)	652	2	25.0	215	59			6
	Hwy HAZUS SDURS	Length (ft)	631	2	25.0	208	57			3
	PBSJ Gas Oil Production Fields	Area (Acres)	271	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	8	1	-	0	0			0
	Residential - Single Family Dwelling	Count	1	2	20.8	176	42	159	599	10
SM-60	Commercial - Entertainment and Recreation	Count	1	1	9.0	1,374	227			0
	Commercial- Professional/ Technical Services	Count	1	1	11.0	1,940	341			4
	Commercial- Retail Trade	Count	1	1	9.0	692	114			3
	Delta Roads PBSJ Minor Roads	Length (ft)	805	1	25.0	161	44			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	3	0.0	2,000	0	727	6,167	0
SM-84	Commercial- Retail Trade	Count	1	4	18.0	162	80			6
	Delta Roads PBSJ Minor Roads	Length (ft)	57,165	4	25.0	11,433	3,144			6
	PBSJ Gas Oil Production Fields	Area (Acres)	9	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	9	1	-	0	0			0
	Residential - Single Family Dwelling	Count	11	4	29.3	3,498	1,225	4,449	15,093	14
SM-85-Grizzly Island	Delta Roads PBSJ Minor Roads	Length (ft)	45,163	4	25.0	9,033	2,484			6
	NG Pipelines DWR	Length (ft)	30,134	4	0.0	5,726	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	190	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	12	3	-	0	0			0
	Petr Pipelines DWR	Length (ft)	2,326	4	0.0	488	0			0
	Residential - Single Family Dwelling	Count	5	4	29.3	1,686	590	3,074	16,933	14
Smith Tract	Residential - Single Family Dwelling	Count	1	0	12.5	237	30	30	237	6
Staten Island	Commercial- Retail Trade	Count	1	18	100.0	246	271			18
	Delta Roads PBSJ Major Roads	Length (ft)	4,422	18	25.0	1,459	401			6
	Delta Roads PBSJ Minor Roads	Length (ft)	46,221	18	25.0	9,244	2,542			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	15	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	26,158	18	0.0	6,801	0			0

	PBSJ Gas Oil Production Fields	Area (Acres)	1,636	18	0.0	0	0	4,105	20,596				
	PBSJ Gas Oil Wells	Count	34	15	-	0	0						
	Residential - Manufactured Housing	Count	7	18	100.0	329	341						
	Residential - Single Family Dwelling	Count	3	18	100.0	518	550						
Sutter Island	Delta Roads PBSJ Major Roads	Length (ft)	3,515	7	25.0	1,160	319	9,140	26,333				
	Delta Roads PBSJ Minor Roads	Length (ft)	63,251	7	25.0	12,650	3,479						
	Hwy HAZUS SDURS	Length (ft)	5,145	7	25.0	1,698	467						
	PBSJ Gas Oil Wells	Count	5	4	-	0	0						
	Residential - Manufactured Housing	Count	2	7	100.0	60	61						
	Residential - Single Family Dwelling	Count	38	7	37.0	10,256	4,580						
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	7	38.5	510	233						
Terminus_ Tract 1	bridges not in HAZUS	Count	1	0	0.0	1,000	0	180	2,814				
	Commercial- Professional/ Technical Services	Count	1	2	11.0	4	1						
	Commercial- Retail Trade	Count	1	2	9.0	10	2						
	Delta Roads PBSJ Minor Roads	Length (ft)	1,329	2	25.0	266	73						
	PBSJ Gas Oil Production Fields	Area (Acres)	28	2	0.0	0	0						
	PBSJ Gas Oil Wells	Count	2	2	-	0	0						
	Residential - Manufactured Housing	Count	2	2	44.0	138	64						
	Residential - Single Family Dwelling	Count	1	2	16.4	216	40						
	Schools HAZUS SDURS	Count	1	0	0.0	1,180	0						
Terminus_ Tract 2	Agriculture	Count	1	14	100.0	2,270	2,147	42,275	64,033				
	Boatlaunch	Count	1	15	100.0	100	110						
	Commercial - Wholesale Trade	Count	1	14	49.0	4,062	3,329						
	Commercial- Professional/ Technical Services	Count	1	14	100.0	172	189						
	Commercial- Retail Trade	Count	1	14	100.0	1,282	1,410						
	Delta Roads PBSJ Major Roads	Length (ft)	3,597	14	25.0	1,187	326						
	Delta Roads PBSJ Minor Roads	Length (ft)	93,422	14	25.0	18,684	5,138						
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0						
	Hwy HAZUS SDURS	Length (ft)	24,235	14	25.0	7,998	2,199						
	PBSJ Cell Towers	Count	1	17	-	250	0						
	PBSJ Gas Oil Production Fields	Area (Acres)	655	14	0.0	0	0						
	PBSJ Gas Oil Wells	Count	21	13	-	0	0						
	Residential - Duplex	Count	2	14	100.0	855	909						
	Residential - Manufactured Housing	Count	191	14	100.0	9,783	10,151						
	Residential - Single Family Dwelling	Count	75	14	100.0	15,390	16,365						
	Terminus_ Tract 3	Delta Roads PBSJ Minor Roads	Length (ft)	251	2	25.0	50						14
Residential - Manufactured Housing		Count	7	2	44.0	345	159						
Residential - Single Family Dwelling		Count	3	2	16.4	545	100						
Twitchell_Island	Delta Roads PBSJ Minor Roads	Length (ft)	26,529	17	25.0	5,306	1,459	9,038	14,493				
	NG Pipelines DWR	Length (ft)	8,803	17	0.0	2,025	0						
	NG Wells DWR Not in PBSJ	Count	1	21	-	0	0						
	PBSJ Gas Oil Production Fields	Area (Acres)	2,197	17	0.0	0	0						
	PBSJ Gas Oil Wells	Count	35	15	-	0	0						
	Residential - Duplex	Count	1	17	100.0	396	421						
	Residential - Manufactured Housing	Count	28	17	100.0	1,446	1,500						
	Residential - Single Family Dwelling	Count	24	17	100.0	4,956	5,270						
	Residential - Triplex-Quads	Count	1	17	100.0	294	313						
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	17	100.0	71	75						
Tyler_Island 2	Airports HAZUS SDURS	Count	1	12	25.0	6,431	1,769						
	Delta Roads PBSJ Major Roads	Length (ft)	5,160	16	25.0	1,703	468						
	Delta Roads PBSJ Minor Roads	Length (ft)	167,780	16	25.0	33,556	9,228						
	Hwy Bridge HAZUS SDURS	Length (ft)	1	8	0.0	2,000	0						
	NG Pipelines DWR	Length (ft)	35,509	16	0.0	7,457	0						
	PBSJ Gas Oil Production Fields	Area (Acres)	4,237	16	0.0	0	0						
	PBSJ Gas Oil Wells	Count	96	15	-	0	0						
	Residential - Manufactured Housing	Count	2	16	100.0	245	254						
	Residential - Single Family Dwelling	Count	17	16	100.0	4,800	5,104						

Union_Island 1	Runway HAZUS SDURS	Count	1	0	0.0	36,674	0	16,822	92,865	0
	Solid Waste Facilities	Count	1	0	0.0	0	0			0
	Dams HAZUS SDURS	Count	1	8	0.0	0	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	38,706	7	25.0	12,773	3,513			6
	Delta Roads PBSJ Minor Roads	Length (ft)	160,116	7	25.0	32,023	8,806			6
	NG Pipelines DWR	Length (ft)	53,022	7	0.0	10,074	0			0
	PBSJ Cell Towers	Count	1	0	-	250	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,773	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	32	2	-	0	0			0
	Residential - Duplex	Count	3	7	38.5	1,203	550			18
	Residential - Institutional Dormitory	Count	4	7	16.0	22,850	6,686			8
	Residential - Manufactured Housing	Count	16	7	100.0	683	698			24
	Residential - Single Family Dwelling	Count	47	7	37.0	11,534	5,151			18
	Schools HAZUS SDURS	Count	1	3	7.0	1,180	402			3
	Transmission Line	Length (ft)	123,469	7	-	30,400	0			0
Union_Island 4	Delta Roads PBSJ Minor Roads	Length (ft)	40	7	25.0	8	2	2	8	6
	PBSJ Gas Oil Production Fields	Area (Acres)	1	2	0.0	0	0			0
Upper_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	1,665	2	25.0	333	92	133	2,099	6
	NG Pipelines DWR	Length (ft)	2,484	2	0.0	472	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	230	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	0	-	0	0			0
	Residential - Single Family Dwelling	Count	1	2	16.4	225	41			8
Van_Sickle_Island	Transmission Line	Length (ft)	4,340	2	-	1,069	0	16,745	100,810	0
	PBSJ Gas Oil Production Fields	Area (Acres)	294	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	16	3	-	0	0			0
	Residential - Single Family Dwelling	Count	3	3	25.8	810	245			12
Veale_Tract 1	Sewage Treat	Count	1	2	15.0	100,000	16,500	5,451	17,156	6
	Commercial- Professional/ Technical Services	Count	1	7	41.0	270	180			15
	Commercial- Retail Trade	Count	1	7	26.0	84	49			9
	Delta Roads PBSJ Minor Roads	Length (ft)	5,221	7	25.0	1,044	287			6
	PBSJ Gas Oil Production Fields	Area (Acres)	86	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	7	-	0	0			0
	Residential - Manufactured Housing	Count	5	7	100.0	266	272			24
	Residential - Single Family Dwelling	Count	31	7	39.1	9,720	4,663			19
Veale_Tract 2	Transmission Line	Length (ft)	17,928	7	-	5,772	0	938	5,503	0
	Delta Roads PBSJ Minor Roads	Length (ft)	73	2	25.0	15	4			6
	NG Pipelines DWR	Length (ft)	7	2	0.0	1	0			0
	Residential - Institutional Dormitory	Count	1	2	10.0	4,968	809			5
Venice_Island	Residential - Single Family Dwelling	Count	2	2	20.8	519	125	3,705	13,308	10
	Delta Roads PBSJ Minor Roads	Length (ft)	66,238	22	25.0	13,248	3,643			6
	PBSJ Gas Oil Wells	Count	4	23	-	0	0			0
Victoria_Island	Residential - Manufactured Housing	Count	2	22	100.0	60	62	20,592	57,089	24
	Delta Roads PBSJ Minor Roads	Length (ft)	67,467	14	25.0	13,493	3,711			6
	Hwy HAZUS SDURS	Length (ft)	23,053	0	0.0	7,607	0			0
	NG Pipelines DWR	Length (ft)	9,170	14	0.0	1,742	0			0
	PBSJ Gas Oil Wells	Count	2	15	-	0	0			0
	Residential - Institutional Dormitory	Count	5	14	38.0	28,835	15,563			18
	Residential - Manufactured Housing	Count	1	14	100.0	45	47			24
	Residential - Single Family Dwelling	Count	3	14	100.0	1,196	1,271			24
Walnut_Grove	Transmission Line	Length (ft)	12,954	14	-	4,171	0			0
	Commercial- Professional/ Technical Services	Count	1	7	38.0	554	360			14
	Commercial- Retail Trade	Count	1	7	23.0	288	163			8
	Communication HAZUS SDURS	Count	3	0	0.0	354	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	3,282	7	25.0	1,083	298			6
	Delta Roads PBSJ Minor Roads	Length (ft)	24,278	7	25.0	4,856	1,335			6
	hc ambulatory	Count	1	0	2.0	0	0			1
	Hwy Bridge HAZUS SDURS	Length (ft)	2	0	0.0	4,000	0			0

	PBSJ Gas Oil Production Fields	Area (Acres)	285	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	7	-	0	0			0
	Residential - Duplex	Count	14	7	38.5	5,943	2,720			18
	Residential - Manufactured Housing	Count	7	7	100.0	416	425			24
	Residential - Single Family Dwelling	Count	142	7	37.0	37,839	16,899	22,199	55,332	18
Water Zone 1	Boatlaunch	Count	8	0	0.0	800	0			0
	Commercial- Professional/ Technical Services	Count	1	11	100.0	2,200	2,178			18
	Commercial- Retail Trade	Count	1	11	42.0	2,260	1,516			15
	Delta Roads PBSJ Major Roads	Length (ft)	24,292	2	25.0	8,016	2,204			6
	Delta Roads PBSJ Minor Roads	Length (ft)	167,715	2	25.0	33,543	9,224			6
	Fire Stations HAZUS SDURS	Count	1	0	0.0	1,770	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	2	0	0.0	4,000	0			0
	Hwy HAZUS SDURS	Length (ft)	71,411	2	25.0	23,566	6,481			3
	NG Pipelines DWR	Length (ft)	56,786	2	0.0	15,900	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,533	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	26	0	-	0	0			0
	PBSJ Substation	Count	6	1	25.0	6,000	1,650			0
	Petr Pipelines DWR	Length (ft)	459	2	0.0	96	0			0
	Police Station HAZUS SDURS	Count	1	0	0.0	4,130	0			0
	Residential - Manufactured Housing	Count	62	2	44.0	3,356	1,550			21
	Residential - Single Family Dwelling	Count	126	2	16.4	31,724	5,833			8
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	11	100.0	381	405			24
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	11	100.0	42	45			24
	Schools HAZUS SDURS	Count	1	0	0.0	1,180	0			0
	Transmission Line	Length (ft)	34,201	2	-	8,421	0	31,087	147,384	0
Water Zone 2	Boatlaunch	Count	11	1	0.0	1,100	0			0
	bridges not in HAZUS	Count	5	6	0.0	5,000	0			0
	Commercial- Professional/ Technical Services	Count	1	9	44.0	876	597			16
	Commercial- Retail Trade	Count	1	9	30.0	204	123			11
	Delta Roads PBSJ Minor Roads	Length (ft)	57,158	5	25.0	11,432	3,144			6
	gas pipeline kinder morgan LS 9	Length (ft)	818	5	0.0	172	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	4	2	0.0	8,000	0			0
	Hwy HAZUS SDURS	Length (ft)	11,760	5	25.0	3,881	1,067			3
	NG Pipelines DWR	Length (ft)	36,581	5	0.0	6,950	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,482	5	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	7,820	3	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	2,615	5	0	13,073	0			0
	PBSJ Substation	Count	2	12	25.0	2,000	550			0
	Petr Pipelines DWR	Length (ft)	83,727	9	0.0	17,583	0			0
	Ports HAZUS SDURS	Count	16	5	0.0	41,158	0			0
	Rail Bridge HAZUS SDURS	Count	1	2	25.0	1,000	275			1
	Rail HAZUS SDURS	Length (ft)	29,631	16	25.0	8,445	2,322			1
	Residential - Institutional Dormitory	Count	1	8	18.0	6,656	2,162			9
	Residential - Manufactured Housing	Count	30	5	100.0	1,689	1,691			24
	Residential - Single Family Dwelling	Count	230	5	29.3	73,952	25,895			14
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	9	45.5	326	176			22
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	9	45.5	677	367			22
	Sewage Treat	Count	4	6	15.0	830,000	136,950			6
	Transmission Line	Length (ft)	34,086	5	-	8,392	0	175,320	1,042,564	0
Water Zone 3	air trans	Count	1	0	-	0	0			0
	Boatlaunch	Count	6	1	0.0	600	0			0
	bridges not in HAZUS	Count	2	1	0.0	2,000	0			0
	Commercial- Professional/ Technical Services	Count	1	9	47.0	2,048	1,431			17
	Commercial- Retail Trade	Count	1	9	34.0	486	305			12
	Delta Roads PBSJ Major Roads	Length (ft)	4,559	1	25.0	1,505	414			6
	Delta Roads PBSJ Minor Roads	Length (ft)	53,304	1	25.0	10,661	2,932			6
	Hwy Bridge HAZUS SDURS	Length (ft)	3	0	0.0	6,000	0			0

	Hwy HAZUS SDURS	Length (ft)	1,945	1	25.0	642	177			3
	NG Pipelines DWR	Length (ft)	6,940	1	0.0	1,596	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	738	1	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	0	-	0	0			0
	Residential - Duplex	Count	1	1	15.5	788	140			7
	Residential - Manufactured Housing	Count	47	1	44.0	2,568	1,083			21
	Residential - Single Family Dwelling	Count	45	1	16.4	10,547	1,939			8
	Residential - Triplex-Quads	Count	1	1	15.5	356	63			7
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	9	48.0	87	50			23
	Sewage Treat	Count	1	0	0.0	85,000	0			0
	Transmission Line	Length (ft)	5,264	1	-	1,296	0			0
	water trans	Count	1	0	0.0	0	0	8,532	126,178	0
Water Zone 4	Boatlaunch	Count	3	0	0.0	300	0			0
	Commercial - Entertainment and Recreation	Count	1	2	9.0	1,430	307			0
	Commercial - Personal and Repair Services	Count	5	2	9.0	11,490	2,465			3
	Commercial - Wholesale Trade	Count	1	2	5.0	3,118	600			2
	Commercial- Professional/ Technical Services	Count	1	8	44.0	7,248	4,943			16
	Commercial- Retail Trade	Count	1	8	30.0	1,282	776			11
	Delta Roads PBSJ Minor Roads	Length (ft)	84,845	2	25.0	16,969	4,666			6
	gas pipeline kinder morgan LS 9	Length (ft)	2,097	2	0.0	440	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	3	0	0.0	6,000	0			0
	Hwy HAZUS SDURS	Length (ft)	7,443	2	25.0	2,456	675			3
	NG Pipelines DWR	Length (ft)	21,265	2	0.0	4,040	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	134	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	7,820	2	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	8,377	2	0	41,887	0			0
	Rail HAZUS SDURS	Length (ft)	2,956	9	25.0	842	232			1
	Residential - Manufactured Housing	Count	3	2	44.0	245	113			21
	Residential - Single Family Dwelling	Count	63	5	29.3	20,322	7,116			14
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	8	45.5	615	333			22
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	8	45.5	270	146			22
	Transmission Line	Length (ft)	8,997	2	-	2,897	0	22,373	121,851	0
Water Zone 5	bridges not in HAZUS	Count	2	16	0.0	2,000	0			0
	Commercial- Professional/ Technical Services	Count	1	11	100.0	26	26			18
	Commercial- Retail Trade	Count	1	11	38.0	744	483			14
	Delta Roads PBSJ Major Roads	Length (ft)	994	8	25.0	328	90			6
	Delta Roads PBSJ Minor Roads	Length (ft)	12,100	0	0.0	2,420	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	1	0	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	1,155	0	0.0	375	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1	0	0.0	0	0			0
	Petr Pipelines DWR	Length (ft)	332	0	0.0	70	0			0
	Rail HAZUS SDURS	Length (ft)	453	0	0.0	129	0			0
	Residential - Manufactured Housing	Count	2	0	11.0	120	11			5
	Residential - Single Family Dwelling	Count	46	0	12.5	16,002	2,054			6
	Transmission Line	Length (ft)	3,234	0	-	796	0	2,663	25,010	0
Webb_Tract	NG Pipelines DWR	Length (ft)	1,291	19	0.0	245	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	83	19	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	18	16	-	0	0			0
	Residential - Single Family Dwelling	Count	1	19	100.0	171	182	182	416	24
Woodward_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,147	16	25.0	5,629	1,548			6
	gas pipeline kinder morgan LS 9	Length (ft)	7,820	16	0.0	1,642	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	23,350	16	-	116,749	9,760			1
	Rail HAZUS SDURS	Length (ft)	2,290	0	0.0	653	0	11,308	124,673	0
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	9,701	5	25.0	1,940	534			6
	PBSJ Gas Oil Wells	Count	2	16	-	0	0			0
	Residential - Single Family Dwelling	Count	4	8	39.1	1,277	612			19
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	14	100.0	81	86			24

	Residential- Multi- Dwellings- 20 to 49 units	Count	1	14	100.0	27	29			24
	Transmission Line	Length (ft)	53,221	11	-	13,104	0	1,261	16,428	0
Yolo Bypass	Delta Roads PBSJ Minor Roads	Length (ft)	982	1	25.0	196	54	54	196	6
Zone 14	NG Pipelines DWR	Length (ft)	2,272	7	0.0	432	0			0
	PBSJ Gas Oil Wells	Count	1	7	-	0	0	0	432	0
Zone 155	Transmission Line	Length (ft)	769	4	-	189	0	0	189	0
Zone 162	Delta Roads PBSJ Minor Roads	Length (ft)	3,113	2	25.0	623	171			6
	NG Pipelines DWR	Length (ft)	1,544	2	0.0	293	0			0
	Residential - Single Family Dwelling	Count	5	2	16.4	1,428	263	434	2,344	8
Zone 186	Transmission Line	Length (ft)	13,335	4	0.0	3,283	0	0	3,283	0
Zone 206	bridges not in HAZUS	Count	1	0	0.0	1,000	0			0
	Commercial - Entertainment and Recreation	Count	1	2	11.0	1,868	545			0
	Commercial - Personal and Repair Services	Count	1	2	12.0	1,908	567			4
	Commercial - Wholesale Trade	Count	1	2	8.0	3,678	1,011			3
	Commercial- Professional/ Technical Services	Count	1	2	16.0	1,820	581			6
	Commercial- Retail Trade	Count	1	2	14.0	948	292			5
	Delta Roads PBSJ Major Roads	Length (ft)	7,934	2	25.0	2,618	720			6
	Delta Roads PBSJ Minor Roads	Length (ft)	483	2	25.0	97	27			6
	PBSJ Gas Oil Production Fields	Area (Acres)	3	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	2	-	0	0			0
	Petr Pipelines DWR	Length (ft)	31,151	2	0.0	6,542	0			0
	Rail HAZUS SDURS	Length (ft)	7,825	2	25.0	2,230	613			1
	Residential - Institutional Dormitory	Count	1	2	10.0	2,568	418	4,773	25,276	5
Zone 207	Delta Roads PBSJ Minor Roads	Length (ft)	1,855	2	25.0	371	102			6
	Petr Pipelines DWR	Length (ft)	1,905	2	0.0	400	0			0
	Rail HAZUS SDURS	Length (ft)	4,131	2	25.0	1,177	324	426	1,948	1
Zone 31	Residential - Single Family Dwelling	Count	2	0	12.5	645	83	83	645	6
Zone 33	Residential - Single Family Dwelling	Count	1	0	12.5	245	31	31	245	6
Zone 36	Residential - Single Family Dwelling	Count	1	1	16.4	405	74			8
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	1	15.5	6	1			7
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	1	15.5	5	1			7
	Solid Waste Facilities	Count	1	0	0.0	0	0	76	416	0
Zone 37	Commercial - Entertainment and Recreation	Count	1	5	14.0	1,446	724			0
	Commercial- Professional/ Technical Services	Count	1	5	28.0	272	157			10
	Commercial- Retail Trade	Count	1	5	18.0	286	149			6
	Delta Roads PBSJ Minor Roads	Length (ft)	221	5	25.0	44	12			6
	hc ambulatory	Count	1	0	2.0	0	0			1
	Hwy HAZUS SDURS	Length (ft)	60	5	25.0	20	5			3
	Petr Pipelines DWR	Length (ft)	487	5	0.0	102	0			0
	Rail HAZUS SDURS	Length (ft)	495	5	25.0	141	39			1
	Residential - Manufactured Housing	Count	3	5	100.0	171	173			24
	Residential - Single Family Dwelling	Count	4	5	29.3	732	271			14
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	5	28.5	30	11			14
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	5	28.5	180	66	1,608	3,424	14
Zone 38	Commercial- Professional/ Technical Services	Count	1	1	11.0	42	7			4
	Commercial- Retail Trade	Count	1	1	9.0	30	5			3
	Delta Roads PBSJ Minor Roads	Length (ft)	450	1	25.0	90	25			6
	Hwy HAZUS SDURS	Length (ft)	95	1	25.0	31	9			3
	Petr Pipelines DWR	Length (ft)	1,314	1	0.0	276	0			0
	Rail HAZUS SDURS	Length (ft)	1,559	1	25.0	444	122			1
	Residential- Multi- Dwellings- 10 to 19 units	Count	1	1	15.5	2	0			7
	Residential- Multi- Dwellings- 20 to 49 units	Count	1	1	15.5	6	1	169	921	7
Zone 64	PBSJ Gas Oil Production Fields	Area (Acres)	1	0	0.0	0	0			0
	Residential - Single Family Dwelling	Count	2	0	12.5	588	75	75	588	6
Zone 90	Hazmat HAZUS SDURS	Count	2	0	-	0	0			0
	Petr Pipelines DWR	Length (ft)	26	2	0.0	6	0			0
	Rail HAZUS SDURS	Length (ft)	13	2	25.0	4	1	1	9	1

Table 7- 1b: Estimate Summary of Asset Cost Damage by Island - Mean Higher High Water - (MHHW)

Island Name	Total Repair Costs	Total Asset Value	Percent of Total Value Damaged (%)
Bacon Island	31,586	43,916	72
Bethel Island	148,408	254,118	58
Bishop Tract	2,853	18,249	16
Bixler Tract	155	636	24
Bouldin Island	14,359	25,897	55
Brack Tract	2,830	12,771	22
Bradford Island	11,554	21,630	53
Brannan-Andrus Island	138,312	215,569	64
Browns Island	0	0	0
Byron Tract 1	19,404	117,359	17
Byron Tract 2	3,436	21,871	16
Cache Haas Tract 1	4,408	21,331	21
Cache Haas Tract 2	1,167	4,215	28
Canal Ranch	4,347	10,807	40
Chippis Island	0	0	0
Clifton Court Forebay Water	504	4,206	12
Coney Island	13,187	21,921	60
Deadhorse Island	156	998	16
Decker Island	0	1,536	0
Egbert Tract	3,862	20,954	18
Elk Grove 1	69	252	28
Empire Tract	3,426	9,790	35
Fabian Tract	6,574	29,152	23
Fay Island	6	22	28
Glanville Tract	1,202	6,230	19
Grand Island	182,004	253,980	72
Hastings Tract 1	0	6	7
Hastings Tract 2	2,478	12,183	20
Holland Land	6,186	22,496	28
Holland Tract	6,432	15,787	41
Honker Bay Club	65	2,111	3
Hotchkiss Tract 1	48,771	125,411	39
Hotchkiss Tract 2	184	1,119	16
Jersey Island	3,266	24,614	13
Jones Tract-Upper and Lower	69,757	508,474	14
King Island	32,968	44,049	75
Libby McNeil Tract 1	6,207	19,259	32
Libby McNeil Tract 2	152	1,203	13
Liberte Island	1,968	14,599	13
Lincoln Village Tract	5,181	18,902	27
Lisbon District	2,836	11,583	24
Little Holland Tract	0	0	0
Little Egbert Tract	1,698	7,290	23
Lower Roberts Island	370	1,149	32
Mandeville Island	1,433	5,212	28
McCormack Williamson Tract	546	3,115	18
McDonald Tract	21,141	36,246	58
McMullin Ranch-River Junction Tract	2,092	7,607	28
Medford Island	4,637	8,559	54
Merritt Island	5,932	19,832	30
Middle Roberts Island	45,573	542,741	8
Netherlands 2	32,590	117,086	28
New Hope Tract	13,281	39,244	34
Orwood Tract	36,930	247,312	15
Palm Tract	6,973	22,563	31
Peter Pocket	598	2,575	23
Pico Naglee Tract	6,002	26,148	23
Pierson Tract	24,869	70,446	35
Pittsburg	3,508	23,642	15
Prospect Island	468	1,788	26
Quimby Island	134	1,126	12
Rindge Tract	6,017	18,516	32

Rio Blanco Tract	206	5,065	4
Roberts Island	4,056	14,849	27
Rough and Ready Island	18,652	50,513	37
Ryer Island	24,503	42,835	57
Sargent Barnhart Tract 2	280,988	696,608	40
Sargent Barnhart Tract 3	1,502	19,826	8
Schaffer-Pintail Tract	954	3,080	31
Sherman Island	22,203	114,940	19
Shima Tract	275	7,137	4
Shin Kee Tract	82	807	10
Simmons-Wheeler Island	61	252	24
SM-123	387	3,582	11
SM-124	6,480	226,566	3
SM-132	117	263	45
SM-133	0	0	0
SM-134	0	0	0
SM-198	602	3,321	18
SM-199	483	1,341	36
SM-202	64	266	24
SM-39	400	2,011	20
SM-40	428	1,556	28
SM-41	21	3,633	1
SM-42	275	1,754	16
SM-43	88	252	35
SM-44	648	3,356	19
SM-46	129	474	27
SM-47	0	0	0
SM-48	6,777	43,428	16
SM-49	679	3,272	21
SM-51	0	0	0
SM-52	293	942	31
SM-53	1	42	4
SM-54	419	1,549	27
SM-55	989	5,213	19
SM-56	556	3,761	15
SM-57	251	4,466	6
SM-58	211	768	28
SM-59	159	599	27
SM-60	727	6,167	12
SM-84	4,449	15,093	29
SM-85-Grizzly Island	3,074	16,933	18
Smith Tract	30	237	13
Staten Island	4,105	20,596	20
Sutter Island	9,140	26,333	35
Terminus Tract 1	180	2,814	6
Terminus Tract 2	42,275	64,033	66
Terminus Tract 3	273	940	29
Twitchell Island	9,038	14,493	62
Tyler Island 2	16,822	92,865	18
Union Island 1	25,807	122,968	21
Union Island 4	2	8	28
Upper Roberts Island	133	2,099	6
Van Sickle Island	16,745	100,810	17
Veale Tract 1	5,451	17,156	32
Veale Tract 2	938	5,503	17
Venice Island	3,705	13,308	28
Victoria Island	20,592	57,089	36
Walnut Grove	22,199	55,332	40
Water Zone 1	31,087	147,384	21
Water Zone 2	175,320	1,042,564	17
Water Zone 3	8,532	126,178	7
Water Zone 4	22,373	121,851	18
Water Zone 5	2,663	25,010	11
Webb Tract	182	416	44
Woodward Island	11,308	124,673	9
Wright-Elmwood Tract	1,261	16,428	8
Yolo Bypass	54	196	28
Zone 14	0	432	0
Zone 155	0	189	0
Zone 162	434	2,344	19

Zone 186	0	3,283	0
Zone 206	4,773	25,276	19
Zone 207	426	1,948	22
Zone 31	83	645	13
Zone 33	31	245	13
Zone 36	76	416	18
Zone 37	1,608	3,424	47
Zone 38	169	921	18
Zone 64	75	588	13
Zone 90	1	9	11
Total (\$1,000)	1,815,139	6,688,928	27

Table 7- 2 a: Estimate of Asset Cost Damage and Repair Times- 100-year Flood (Current)

Total Asset Value: \$56.3 Billion

1	2	3	4	5	6	7	8	9	10	11
Island Name	Asset Type	Inventory Unit	GIS Quantity (current)	Avg Inundation Depth (ft)	Percent Damage	Total Asset Value (Structure + Contents) (\$1,000)	Total Inundation Repair Costs (Structural + Content + Debris) (\$1,000)	Per Island Inundation Repair Costs (\$1000)	Per Island Asset Value (\$1000)	Repair Time (Months)
Bacon_Island	Delta Roads PBSJ Minor Roads	Length (ft)	37,654	21	25	7,531	2,071	31,586	43,916	6
	gas oil wells	Count	8	21	0	0	0			0
	Natural Gas Pipeline	Length (ft)	28,288	21	0	8,628	0			0
	Residential - Institutional and Dormitory Housing	Count	5	21	100	27,758	29,515			24
Bethel_Island	Boatlaunch	Count	3	10	100	300	330	240,145	254,118	0
	Delta Roads PBSJ Minor Roads	Length (ft)	157,050	13	25	31,410	8,638			6
	Gas Oil Production Fields	Area (Acres)	722	13	0	0	0			0
	gas oil wells	Count	24	13	0	0	0			0
	Natural Gas Pipeline	Length (ft)	23,383	13	0	4,443	0			0
	Natural Gas Wells	Count	2	15	-	0	0			0
	Residential - Duplex	Count	7	13	100	3,468	3,688			24
	Residential - Manuf. Housing	Count	451	13	100	23,078	23,947			24
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	13	100	1,215	1,292			24
	Residential - Single Family Dwelling	Count	693	13	100	190,205	202,251			24
	solid waste facilities	Count	1	11	25	0	0			0
	utilities	Count	1	10	-	0	0			0
	water trans	Count	2	10	-	0	0			0
	Boatlaunch	Count	1	9	100	100	110			0
Bishop_Tract	Commercial - Retail Trade	Count	1	9	30	36	22	60,201	141,119	11
	Delta Roads PBSJ Major Roads	Length (ft)	2,483	9	25	819	225			6
	Delta Roads PBSJ Minor Roads	Length (ft)	91,434	9	25	18,287	5,029			6
	Gas Oil Production Fields	Area (Acres)	98	23	0	0	0			0
	gas oil wells	Count	1	13	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	6	4	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	10,846	9	25	3,579	984			3
	Residential - Manuf. Housing	Count	1	9	100	39	40			24
	Residential - Single Family Dwelling	Count	304	9	44	94,247	49,779			21
	Residential - Triplex-Quads	Count	1	9	46	297	161			22
	substation ca	Count	2	5	25	2,000	550			0
	transln ca	Length (ft)	39,458	9	-	9,715	0			0
	Delta Roads PBSJ Minor Roads	Length (ft)	150	5	25	30	8			6
	Gas Oil Production Fields	Area (Acres)	86	5	0	0	0			0
Bixler_Tract	gas oil wells	Count	3	5	0	0	0	455	1,161	0
	Residential - Single Family Dwelling	Count	3	5	33	1,131	447			16
	bridges not in HAZUS	Count	2	3	25	1,000	275			3
	Commercial - Personal and Repair Services	Count	1	3	13	2,800	1,155			5
Boggs_Tract	Commercial - Professional and Technical Services	Count	1	3	22	19,984	9,233			8
	Commercial - Retail Trade	Count	1	3	16	21,558	9,248			6
	Commercial - Wholesale Trade	Count	13	3	11	60,268	24,198			4
	Delta Roads PBSJ Major Roads	Length (ft)	21,846	3	25	7,209	1,983			6
	Delta Roads PBSJ Minor Roads	Length (ft)	134,924	3	25	26,985	7,421			6

	Elec Power HAZUS SDURS	Count	1	6	100	129,800	142,780			0
	Gas Oil Production Fields	Area (Acres)	68	3	0	0	0			0
	Hazmat HAZUS SDURS	Count	19	6	-	0	0			0
	hc ambulatory	Count	1	3	12	0	0			4
	hc nursing_res	Count	1	1	7	0	0			3
	Hwy Bridge HAZUS SDURS	Count	3	5	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	7,385	3	25	2,437	670			3
	Industrial - Heavy	Count	3	3	15	22,918	9,227			5
	Industrial - Light	Count	1	3	17	7,405	3,046			6
	Intermodal terminal facilities	Count	5	3	-	0	0			0
	Petroleum Pipelines	Length (ft)	23,797	3	0	4,997	0			0
	pipeline trans	Count	1	5	-	0	0			0
	Port HAZUS SDURS	Count	12	1	0	30,869	0			0
	rail 1000 nodes	Count	10	4	-	0	0			0
	Rail Bridge HAZUS SDURS	Count	2	2	25	2,000	550			1
	Rail Facility HAZUS SDURS	Count	4	1	25	10,290	2,830			0
	Rail HAZUS SDURS	Length (ft)	35,488	3	25	10,114	2,781			1
	Residential - Duplex	Count	35	3	26	15,719	4,726			12
	Residential - Institutional and Dormitory Housing	Count	1	3	14	5,228	1,131			7
	Residential - Manuf. Housing	Count	34	3	100	1,527	1,478			24
	Residential - Single Family Dwelling	Count	2,381	3	26	606,555	183,483			12
	Residential - Triplex-Quads	Count	1	3	26	1,583	476			12
	Schools HAZUS SDURS	Count	3	0	0	3,540	0			0
	sewage treat	Count	1	3	30	550,000	181,500			12
	solid waste facilities	Count	1	3	25	0	0			0
	substation ca	Count	1	5	25	1,000	275			0
	tankfarms	Count	5	9	-	15,000	0			0
	utilities	Count	1	14	-	0	0			0
	Waste Water HAZUS SDURS	Count	1	2	20	78,588	17,289			12
	water trans	Count	2	4	-	0	0	607,404	1,645,372	0
Bouldin_Island	air trans	Count	1	25	-	0	0			0
	Commercial - Professional/ Technical Services	Count	1	23	100	7,584	8,342			18
	Commercial - Retail Trade	Count	1	23	100	1,188	1,307			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,505	23	25	497	137			6
	Delta Roads PBSJ Minor Roads	Length (ft)	43,282	23	25	8,656	2,381			6
	gas oil wells	Count	17	23	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	24,159	23	25	7,972	2,192			3
	utilities	Count	1	8	-	0	0	14,359	25,897	0
Brack_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	34,626	15	25	6,925	1,904			6
	Gas Oil Production Fields	Area (Acres)	874	17	0	0	0			0
	gas oil wells	Count	19	16	0	0	0			0
	Natural Gas Pipeline	Length (ft)	25,968	15	0	5,973	0			0
	Residential - Manuf. Housing	Count	9	15	100	437	453			24
	Residential - Single Family Dwelling	Count	4	15	100	687	731	3,088	14,021	24
Bradford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	57,920	17	25	11,584	3,186			6
	gas oil wells	Count	16	17	0	0	0			0
	Natural Gas Pipeline	Length (ft)	7,466	17	0	2,165	0			0
	Natural Gas Wells	Count	6	18	-	0	0			0
	Residential - Duplex	Count	1	17	100	219	233			24
	Residential - Manuf. Housing	Count	9	17	100	444	461			24
	Residential - Single Family Dwelling	Count	27	17	100	7,218	7,675	11,554	21,630	24
Brannan-Andrus Island	air trans	Count	1	8	-	0	0			0
	Boatlaunch	Count	8	7	100	800	880			0
	Commercial - Entertainment and Recreation	Count	1	21	100	2,992	3,291			18
	Commercial - Professional/ Technical Services	Count	1	21	100	7,632	8,395			18
	Commercial - Retail Trade	Count	1	21	100	5,476	6,024			18
	Delta Roads PBSJ Major Roads	Length (ft)	28,729	21	25	9,481	2,607			6

	Delta Roads PBSJ Minor Roads	Length (ft)	264,419	21	25	52,884	14,543			6
	Gas Oil Production Fields	Area (Acres)	9,132	21	0	0	0			0
	gas oil wells	Count	157	17	0	0	0			0
	hc hospital	Count	1	14	100	0	0			18
	Hwy Bridge HAZUS SDURS	Count	2	6	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	55,612	21	25	18,352	5,047			3
	Natural Gas Pipeline	Length (ft)	75,805	21	0	17,814	0			0
	Natural Gas Wells	Count	86	18	-	0	0			0
	rail 1000 nodes	Count	1	18	-	0	0			0
	Residential - Duplex	Count	6	21	100	3,909	4,157			24
	Residential - Manuf. Housing	Count	297	21	100	15,386	15,965			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	21	100	3,579	3,806			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	21	100	702	746			24
	Residential - Single Family Dwelling	Count	305	21	100	65,780	69,946			24
	Residential - Triplex-Quads	Count	3	21	100	3,129	3,327			24
	solid waste facilities	Count	1	20	25	0	0			0
	transln ca	Length (ft)	19,080	21	-	4,698	0			0
	water trans	Count	2	12	-	0	0	139,833	216,612	0
Browns_Island	Hazmat HAZUS SDURS	Count	2	6	-	0	0			0
	solid waste facilities	Count	1	6	25	0	0	0	0	0
Byron_Tract 1	air trans	Count	1	6	-	0	0			0
	Commercial - Professional/ Technical Services	Count	1	14	100	2	2			18
	Commercial - Retail Trade	Count	1	14	100	30	33			18
	Delta Roads PBSJ Minor Roads	Length (ft)	23,461	14	25	4,692	1,290			6
	gas oil wells	Count	2	7	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	3	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	6,850	14	25	2,260	622			3
	Residential - Manuf. Housing	Count	3	14	100	177	184			24
	Residential - Single Family Dwelling	Count	10	14	100	2,699	2,869			24
	sewage treat	Count	1	17	30	100,000	33,000			12
Byron_Tract 2	transln ca	Length (ft)	38,965	14	-	12,546	0	38,550	124,406	0
	Boatlaunch	Count	1	4	100	100	110			0
	bridges not in HAZUS	Count	4	14	25	2,000	550			3
	Commercial - Professional/ Technical Services	Count	1	10	50	1,064	761			18
	Commercial - Retail Trade	Count	1	10	38	230	149			14
	Delta Roads PBSJ Minor Roads	Length (ft)	14,293	10	25	2,859	786			6
	gas oil wells	Count	1	2	0	0	0			0
	Residential - Manuf. Housing	Count	3	10	100	107	111			24
	Residential - Single Family Dwelling	Count	17	10	49	5,519	3,263			23
	transln ca	Length (ft)	27,831	10	-	8,961	0	5,729	20,838	0
Byron_Tract 3	Commercial - Professional/ Technical Services	Count	1	4	28	1,608	884			10
	Commercial - Retail Trade	Count	1	4	18	506	250			6
	Delta Roads PBSJ Minor Roads	Length (ft)	3,543	4	25	709	195			6
	Residential - Single Family Dwelling	Count	107	4	29	40,992	14,354	15,684	43,815	14
Cache_Haas_Tract 1	Delta Roads PBSJ Major Roads	Length (ft)	16,839	8	25	5,557	1,528			6
	Delta Roads PBSJ Minor Roads	Length (ft)	194,721	8	25	38,944	10,710			6
	Gas Oil Production Fields	Area (Acres)	3,779	8	0	0	0			0
	gas oil wells	Count	102	7	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	4	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	45,679	8	0	8,679	0			0
	Natural Gas Wells	Count	2	11	-	0	0			0
	Residential - Manuf. Housing	Count	1	8	100	152	156			24
	Residential - Single Family Dwelling	Count	18	8	39	4,662	2,309			19
	transln ca	Length (ft)	18,294	8	-	5,890	0	15,252	65,884	0
Cache_Haas_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	9,202	14	25	1,840	506			6
	Gas Oil Production Fields	Area (Acres)	603	14	0	0	0			0
	gas oil wells	Count	20	15	0	0	0			0

	Natural Gas Wells	Count	1	14	-	0	0			
	Residential - Manuf. Housing	Count	1	14	100	30	31			
	Residential - Single Family Dwelling	Count	5	14	100	1,373	1,459			
	transln_ca	Length (ft)	567	14	-	183	0	1,997	3,425	
Canal Ranch	Commercial - Professional/ Technical Services	Count	1	12	100	2,862	2,833			
	Commercial - Retail Trade	Count	1	12	42	1,878	1,260			
	Delta Roads PBSJ Major Roads	Length (ft)	1,401	12	25	462	127			
	Delta Roads PBSJ Minor Roads	Length (ft)	29,952	12	25	5,990	1,647			
	Gas Oil Production Fields	Area (Acres)	294	12	0	0	0			
	gas oil wells	Count	11	16	0	0	0			
	Hwy Bridge HAZUS SDURS	Count	1	11	25	2,000	550			
	Hwy HAZUS SDURS	Length (ft)	4,670	12	25	1,541	424			
	Natural Gas Pipeline	Length (ft)	1,065	12	0	202	0			
	Natural Gas Wells	Count	1	18	-	0	0			
	Religion - Churches and other Non-Profit	Count	1	12	19	4,950	2,804			
	Residential - Manuf. Housing	Count	7	12	100	332	344			
	Residential - Single Family Dwelling	Count	3	12	100	540	574	10,564	20,757	
Chippis_Island	gas oil wells	Count	2	5	0	0	0	0	0	
Clifton Court Forebay Water	Boatlaunch	Count	1	13	100	100	110			
	Commercial - Professional/ Technical Services	Count	1	13	100	394	390			
	Commercial - Retail Trade	Count	1	13	47	86	60			
	Residential - Single Family Dwelling	Count	2	13	100	515	547			
	transln_ca	Length (ft)	9,886	13	-	3,183	0	1,107	4,278	
Coney_Island	Residential - Manuf. Housing	Count	10	17	100	507	526			
	Residential - Single Family Dwelling	Count	66	17	100	21,414	22,770	23,296	21,921	
Deadhorse Island	Gas Oil Production Fields	Area (Acres)	201	17	0	0	0			
	gas oil wells	Count	3	17	0	0	0			
	Natural Gas Pipeline	Length (ft)	3,862	17	0	734	0			
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	17	100	9	10			
	Residential - Single Family Dwelling	Count	1	17	100	255	271	281	998	
Decker_Island	Natural Gas Pipeline	Length (ft)	8,084	3	0	1,536	0	0	1,536	
Discovery_Bay	Boatlaunch	Count	1	4	100	100	110			
	Commercial - Banks	Count	1	9	22	1,148	644			
	Commercial - Entertainment and Recreation	Count	8	9	22	12,944	7,262			
	Commercial - Medical Clinics	Count	1	9	20	3,503	2,158			
	Commercial - Professional/ Technical Services	Count	1	9	44	15,930	10,864			
	Commercial - Retail Trade	Count	1	9	30	7,842	4,744			
	Delta Roads PBSJ Minor Roads	Length (ft)	97,987	9	25	19,597	5,389			
	hc ambulatory	Count	5	6	17	0	0			
	Hwy HAZUS SDURS	Length (ft)	6,674	9	25	2,202	606			
	Residential - Duplex	Count	1	9	46	1,863	1,010			
	Residential - Manuf. Housing	Count	1	9	100	165	171			
	Residential - Single Family Dwelling	Count	2,799	9	44	1,080,710	570,813			
	Schools HAZUS SDURS	Count	1	1	5	0	0			
	water trans	Count	1	0	-	0	0	603,770	1,146,004	
	Egbert Tract	Delta Roads PBSJ Minor Roads	Length (ft)	92,416	11	25	18,483	5,083		
Gas Oil Production Fields		Area (Acres)	3,532	11	0	0	0			
gas oil wells		Count	107	11	0	0	0			
Natural Gas Pipeline		Length (ft)	34,321	11	0	8,237	0			
Natural Gas Wells		Count	33	10	-	0	0			
Residential - Manuf. Housing		Count	1	11	100	62	64			
Residential - Single Family Dwelling		Count	11	11	100	2,831	3,010			
transln_ca		Length (ft)	12,394	11	-	3,991	0	8,156	33,603	
bridges not in HAZUS		Count	9	7	25	4,500	1,238			
Elk_Grove 1	Commercial - Entertainment and Recreation	Count	3	9	22	5,798	3,253			
	Commercial - Medical Clinics	Count	2	9	20	5,655	3,483			
	Commercial - Personal and Repair Services	Count	3	9	28	7,008	4,163			

	Commercial - Professional/ Technical Services	Count	1	9	44	11,814	8,057			16
	Commercial - Retail Trade	Count	1	9	30	7,782	4,708			11
	Commercial - Wholesale Trade	Count	1	9	25	9,242	5,337			9
	Delta Roads PBSJ Major Roads	Length (ft)	45,031	9	25	14,860	4,087			6
	Delta Roads PBSJ Minor Roads	Length (ft)	246,342	9	25	49,268	13,549			6
	Gas Oil Production Fields	Area (Acres)	599	9	0	0	0			0
	gas oil wells	Count	26	8	0	0	0			0
	hc ambulatory	Count	13	4	13	0	0			5
	hc nursing res	Count	1	3	10	0	0			5
	Hwy Bridge HAZUS SDURS	Count	6	14	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	25,676	9	25	8,473	2,330			3
	Industrial - Construction	Count	1	9	100	5,386	4,799			18
	Industrial - Heavy	Count	1	9	35	5,753	3,240			13
	Industrial - High Technology	Count	3	9	33	53,345	29,574			12
	Industrial - Light	Count	2	9	35	9,315	5,246			13
	Natural Gas Pipeline	Length (ft)	22,431	9	0	7,290	0			0
	Natural Gas Wells	Count	1	13	-	0	0			0
	rail 1000 nodes	Count	1	11	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	18,982	9	25	5,410	1,488			1
	Residential - Duplex	Count	1	9	46	2,166	1,174			22
	Residential - Manuf. Housing	Count	27	9	100	2,061	2,131			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	4	9	46	15,923	8,629			22
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	9	46	2,510	1,360			22
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	9	46	1,442	781			22
	Residential - Single Family Dwelling	Count	3,492	9	44	1,083,656	572,369			21
	Residential - Triplex-Quads	Count	4	9	46	5,237	2,838			22
	substation ca	Count	1	14	25	1,000	275			0
	transln ca	Length (ft)	42,090	9	-	10,363	0			0
	utilities	Count	1	1	-	0	0	687,408	1,347,255	0
Empire_Tract	Boatlaunch	Count	1	26	100	100	110			0
	Delta Roads PBSJ Minor Roads	Length (ft)	44,263	24	25	8,853	2,434			6
	gas oil wells	Count	5	22	0	0	0			0
	Residential - Manuf. Housing	Count	6	24	100	326	338			24
	Residential - Single Family Dwelling	Count	3	24	100	512	544	3,426	9,790	24
Fabian_Tract	air trans	Count	1	10	-	0	0			0
	Boatlaunch	Count	1	12	100	100	110			0
	Commercial - Retail Trade	Count	1	12	42	346	232			15
	Delta Roads PBSJ Major Roads	Length (ft)	5,136	12	25	1,695	466			6
	Delta Roads PBSJ Minor Roads	Length (ft)	69,256	12	25	13,851	3,809			6
	gas oil wells	Count	8	11	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,817	12	0	345	0			0
	Residential - Duplex	Count	4	12	100	1,418	1,507			24
	Residential - Institutional and Dormitory Housing	Count	2	12	30	9,396	4,369			14
	Residential - Manuf. Housing	Count	13	12	100	669	694			24
	Residential - Single Family Dwelling	Count	25	12	100	5,255	5,587			24
	transln ca	Length (ft)	24,537	12	-	6,041	0	16,775	39,116	0
	Delta Roads PBSJ Minor Roads	Length (ft)	112	12	25	22	6	6	22	6
Fay Island										
Glanville_Tract	Commercial - Retail Trade	Count	1	9	30	1,360	823			11
	Delta Roads PBSJ Major Roads	Length (ft)	29,511	9	25	9,739	2,678			6
	Delta Roads PBSJ Minor Roads	Length (ft)	60,173	9	25	12,035	3,309			6
	Gas Oil Production Fields	Area (Acres)	128	9	0	0	0			0
	gas oil wells	Count	18	11	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	7	8	25	14,000	3,850			3
	Hwy HAZUS SDURS	Length (ft)	18,225	9	25	6,014	1,654			3
	Natural Gas Pipeline	Length (ft)	383	9	0	124	0			0
	Rail HAZUS SDURS	Length (ft)	9,282	9	25	2,645	727			1
	Residential - Institutional and Dormitory Housing	Count	1	9	20	2,616	929			10

	Residential - Manuf. Housing	Count	4	9	100	156	161			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	9	46	47	25			22
	Residential - Single Family Dwelling	Count	17	9	44	4,068	2,149	16,305	52,804	21
Gliole_District	Delta Roads PBSJ Major Roads	Length (ft)	7,030	13	25	2,320	638			6
	Delta Roads PBSJ Minor Roads	Length (ft)	900	13	25	180	49			6
	Hwy HAZUS SDURS	Length (ft)	267	13	25	88	24			3
	Rail HAZUS SDURS	Length (ft)	7,101	13	25	2,024	557			1
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	13	100	11	11			24
	Residential - Single Family Dwelling	Count	4	13	100	1,211	1,287			24
	transln_ca	Length (ft)	7,488	13	-	1,844	0	2,566	7,676	0
Grand Island	Agriculture	Count	1	19	100	8,486	8,028			18
	Boatlaunch	Count	1	19	100	100	110			0
	Commercial - Banks	Count	1	19	100	1,084	1,192			18
	Commercial - Professional/ Technical Services	Count	1	19	100	6,378	7,016			18
	Commercial - Retail Trade	Count	1	19	100	6,638	7,302			18
	Delta Roads PBSJ Major Roads	Length (ft)	3,301	19	25	1,089	300			6
	Delta Roads PBSJ Minor Roads	Length (ft)	169,392	19	25	33,878	9,317			6
	Gas Oil Production Fields	Area (Acres)	2,801	19	0	0	0			0
	gas oil wells	Count	96	19	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	7	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	75,585	19	25	24,943	6,859			3
	Industrial - Light	Count	7	19	100	39,675	37,358			18
	Natural Gas Pipeline	Length (ft)	11,589	19	0	2,202	0			0
	Natural Gas Wells	Count	4	18	-	0	0			0
	Residential - Duplex	Count	5	19	100	2,526	2,686			24
	Residential - Institutional and Dormitory Housing	Count	1	19	100	5,649	6,007			24
	Residential - Manuf. Housing	Count	39	19	100	2,070	2,148			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	19	100	3,597	3,825			24
	Residential - Single Family Dwelling	Count	366	19	100	97,203	103,359			24
	Schools HAZUS SDURS	Count	1	26	100	1,180	1,194			18
	substation_ca	Count	1	24	25	1,000	275			0
	transln_ca	Length (ft)	48,858	19	-	12,030	0			0
	US_cell_towers	Count	1	8	-	250	0	198,075	253,978	0
Hastings_Tract 1	Commercial - Retail Trade	Count	1	13	47	6	4			17
	Gas Oil Production Fields	Area (Acres)	45	13	0	0	0	4	6	0
Hastings_Tract 2	Commercial - Retail Trade	Count	1	13	100	182	200			18
	Delta Roads PBSJ Minor Roads	Length (ft)	33,039	13	25	6,608	1,817			6
	Gas Oil Production Fields	Area (Acres)	464	13	0	0	0			0
	gas oil wells	Count	38	13	0	0	0			0
	Natural Gas Wells	Count	3	15	-	0	0			0
	Residential - Manuf. Housing	Count	1	13	100	66	68			24
	Residential - Single Family Dwelling	Count	11	13	100	3,024	3,216			24
Holland_Land	transln_ca	Length (ft)	11,505	13	-	3,704	0	5,301	13,584	0
	Delta Roads PBSJ Major Roads	Length (ft)	119	15	25	39	11			6
	Delta Roads PBSJ Minor Roads	Length (ft)	196	15	25	39	11			6
	gas oil wells	Count	2	15	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,792	15	25	3,231	889			3
	Petroleum Pipelines	Length (ft)	96	15	0	20	0			0
	Residential - Single Family Dwelling	Count	1	15	100	288	306			24
Holland_Tract	transln_ca	Length (ft)	78	15	-	19	0	1,216	3,637	0
	Delta Roads PBSJ Minor Roads	Length (ft)	52,160	16	25	10,432	2,869			6
	gas oil wells	Count	11	16	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	11	25	2,000	550			3
	Residential - Manuf. Housing	Count	4	16	100	192	199			24
Honker_Bay_Club	Residential - Single Family Dwelling	Count	12	16	100	3,164	3,364	6,982	15,787	24
	Gas Oil Production Fields	Area (Acres)	48	7	0	0	0			0
	Natural Gas Pipeline	Length (ft)	4,395	7	0	835	0			0

Hotchkiss_Tract 1	Petroleum Pipelines	Length (ft)	4,793	7	0	1,006	0	119	2,109	0
	Residential - Single Family Dwelling	Count	1	7	37	267	119			18
	Boatlaunch	Count	1	10	100	100	110			0
	Commercial - Professional/ Technical Services	Count	1	10	47	3,034	2,119			17
	Commercial - Retail Trade	Count	1	10	34	670	420			12
	Delta Roads PBSJ Minor Roads	Length (ft)	55,963	10	25	11,193	3,078			6
	Gas Oil Production Fields	Area (Acres)	46	10	0	0	0			0
	gas oil wells	Count	26	10	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	9	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	21,406	10	0	4,067	0			0
	Natural Gas Wells	Count	5	9	-	0	0			0
	Residential - Duplex	Count	6	10	48	2,502	1,437			23
	Residential - Manuf. Housing	Count	97	10	100	5,061	5,233			24
	Residential - Single Family Dwelling	Count	303	10	47	82,611	46,602			22
	Residential - Triplex-Quads	Count	2	10	48	936	537			23
Hotchkiss_Tract 2	transln ca	Length (ft)	45,599	10	-	14,681	0	60,087	126,855	0
	Delta Roads PBSJ Minor Roads	Length (ft)	4,378	10	25	876	241			6
	Gas Oil Production Fields	Area (Acres)	1,032	10	0	0	0			0
	gas oil wells	Count	3	9	0	0	0			0
	Natural Gas Pipeline	Length (ft)	2,370	10	0	450	0			0
Jersey_Island	Delta Roads PBSJ Minor Roads	Length (ft)	37,573	17	25	7,515	2,067	3,266	24,614	6
	Gas Oil Production Fields	Area (Acres)	631	17	0	0	0			0
	gas oil wells	Count	15	15	0	0	0			0
	Natural Gas Pipeline	Length (ft)	11,881	17	0	7,426	0			0
	Natural Gas Wells	Count	3	12	-	0	0			0
	Residential - Manuf. Housing	Count	1	17	100	65	67			24
	Residential - Single Family Dwelling	Count	4	17	100	1,065	1,132			24
	solid waste facilities	Count	1	22	25	0	0			0
	transln ca	Length (ft)	26,539	17	-	8,545	0			0
	bridges not in HAZUS	Count	1	0	0	500	0			0
Jones_Tract-Upper_and_Lower	Commercial - Professional/ Technical Services	Count	1	18	100	478	526	82,676	507,972	18
	Commercial - Retail Trade	Count	1	18	100	88	97			18
	Delta Roads PBSJ Minor Roads	Length (ft)	122,831	18	25	24,566	6,756			6
	Gas Oil Production Fields	Area (Acres)	106	18	0	0	0			0
	gas oil wells	Count	32	19	0	0	0			0
	gas pipeline kinder morgan LS 9	Length (ft)	27,507	18	0	5,776	0			0
	Hwy Bridge HAZUS SDURS	Count	1	17	25	2,000	550			3
	mokelumne aqueduct pipe	Length (ft)	82,207	18	-	411,035	34,363			1
	Natural Gas Pipeline	Length (ft)	15,032	18	0	24,202	0			0
	Natural Gas Storage	Count	1	21	-	0	0			0
	Natural Gas Wells	Count	1	20	-	0	0			0
	Rail Bridge HAZUS SDURS	Count	1	0	0	1,000	0			0
	Rail HAZUS SDURS	Length (ft)	28,464	18	100	8,112	8,800			1
	Residential - Duplex	Count	2	18	100	872	927			24
	Residential - Institutional and Dormitory Housing	Count	4	18	100	25,881	27,520			24
	Residential - Manuf. Housing	Count	9	18	100	401	416			24
	Residential - Single Family Dwelling	Count	13	18	100	2,561	2,723			24
Kasson_District	US cell towers	Count	2	14	-	500	0	1,857	6,153	0
	Delta Roads PBSJ Minor Roads	Length (ft)	3,090	8	25	618	170			6
	gas oil wells	Count	4	9	0	0	0			0
	Residential - Single Family Dwelling	Count	16	8	44	3,195	1,688			21
King_Island	transln ca	Length (ft)	9,505	8	-	2,340	0			0
	Boatlaunch	Count	1	17	100	100	110			0
	Commercial - Entertainment and Recreation	Count	1	18	100	1,772	1,949			18
	Commercial - Professional/ Technical Services	Count	1	18	100	1,866	2,053			18
	Commercial - Retail Trade	Count	1	18	100	13,544	14,898			18
	Delta Roads PBSJ Minor Roads	Length (ft)	44,571	18	25	8,914	2,451			6

	Gas Oil Production Fields	Area (Acres)	177	18	0	0	0			
	gas oil wells	Count	10	18	0	0	0			
	Hwy Bridge HAZUS SDURS	Count	2	18	25	4,000	1,100			
	Natural Gas Wells	Count	2	18	-	0	0			
	Residential - Duplex	Count	1	18	100	281	298			
	Residential - Institutional and Dormitory Housing	Count	1	18	100	5,334	5,672			
	Residential - Manuf. Housing	Count	63	18	100	3,200	3,320			
	Residential - Single Family Dwelling	Count	25	18	100	5,039	5,358			
	water trans	Count	1	21	-	0	0	37,209	44,049	
Libby_McNeil_Tract 1	Commercial - Professional/ Technical Services	Count	1	8	41	1,110	739			
	Commercial - Retail Trade	Count	1	8	26	1,336	779			
	Communication HAZUS SDURS	Count	1	11	100	118	130			
	Delta Roads PBSJ Major Roads	Length (ft)	5,110	8	25	1,686	464			
	Delta Roads PBSJ Minor Roads	Length (ft)	10,178	8	25	2,036	560			
	Gas Oil Production Fields	Area (Acres)	143	8	0	0	0			
	gas oil wells	Count	7	9	0	0	0			
	Residential - Duplex	Count	4	8	43	1,746	887			
	Residential - Manuf. Housing	Count	2	8	100	122	125			
	Residential - Single Family Dwelling	Count	41	8	39	11,106	5,328	9,011	19,259	
Libby_McNeil_Tract 2	Boatlaunch	Count	1	7	100	100	110			
	Commercial - Retail Trade	Count	1	8	30	2	1			
	Delta Roads PBSJ Minor Roads	Length (ft)	345	8	25	69	19			
	Gas Oil Production Fields	Area (Acres)	43	8	0	0	0			
	Residential - Single Family Dwelling	Count	4	8	44	1,032	545	675	1,203	
Liberte Island	Delta Roads PBSJ Minor Roads	Length (ft)	35,789	13	25	7,158	1,968			
	Gas Oil Production Fields	Area (Acres)	744	13	0	0	0			
	gas oil wells	Count	24	13	0	0	0			
	Hwy Bridge HAZUS SDURS	Count	1	12	25	2,000	550			
	Natural Gas Pipeline	Length (ft)	28,636	13	0	5,441	0	2,518	14,599	
Lincoln_Village_Tract	Commercial - Entertainment and Recreation	Count	9	6	18	10,902	5,816			
	Commercial - Professional/ Technical Services	Count	1	6	38	7,226	4,650			
	Commercial - Retail Trade	Count	1	6	23	14,066	7,891			
	Delta Roads PBSJ Major Roads	Length (ft)	5,052	6	25	1,667	458			
	Delta Roads PBSJ Minor Roads	Length (ft)	151,475	6	25	30,295	8,331			
	hc ambulatory	Count	1	9	20	0	0			
	Hwy Bridge HAZUS SDURS	Count	6	7	25	12,000	3,300			
	Hwy HAZUS SDURS	Length (ft)	5,677	6	25	1,873	515			
	Religion - Churches and other Non-Profit	Count	1	6	13	4,296	2,150			
	Residential - Duplex	Count	68	6	39	5,310	2,430			
	Residential - Multi-Dwellings - 10 to 19 units	Count	2	6	39	3,579	1,638			
	Residential - Multi-Dwellings - 5 to 9 units	Count	34	6	39	81,113	37,117			
	Residential - Multi-Dwellings - 50+ units	Count	4	6	39	101,418	46,409			
	Residential - Multi-Dwellings- 10 to 19 units	Count	2	6	39	20,871	9,551			
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	6	39	14,930	6,832			
	Residential - Single Family Dwelling	Count	3,429	6	37	919,649	410,715			
	Residential - Triplex-Quads	Count	76	6	39	32,369	14,812			
	Schools HAZUS SDURS	Count	9	3	7	1,180	402			
	water trans	Count	1	5	-	0	0	563,017	1,262,742	
Lisbon_District	Airports HAZUS SDURS	Count	1	14	25	6,431	1,769			
	Delta Roads PBSJ Major Roads	Length (ft)	20,168	16	25	6,655	1,830			
	Delta Roads PBSJ Minor Roads	Length (ft)	25,630	16	25	5,126	1,410			
	Gas Oil Production Fields	Area (Acres)	794	16	0	0	0			
	gas oil wells	Count	21	16	0	0	0			
	Rail HAZUS SDURS	Length (ft)	16,388	16	25	4,671	1,284			
	Residential - Duplex	Count	1	16	100	279	297			
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	16	100	431	458			
	Residential - Single Family Dwelling	Count	50	16	100	13,514	14,369			

	Runway HAZUS SDURS	Count	1	14	25	36,674	10,085			0
	transln_ca	Length (ft)	16,184	16	-	3,985	0			0
	US cell towers	Count	1	9	-	250	0	31,502	78,015	0
Little Holland Tract	Gas Oil Production Fields	Area (Acres)	88	12	0	0	0			0
	gas oil wells	Count	2	12	0	0	0	0	0	0
Little_Egbert□_Tract	Commercial - Professional/ Technical Services	Count	1	15	100	2	2			18
	Commercial - Retail Trade	Count	1	15	100	2	2			18
	Delta Roads PBSJ Major Roads	Length (ft)	150	15	25	49	14			6
	Delta Roads PBSJ Minor Roads	Length (ft)	19,720	15	25	3,944	1,085			6
	Gas Oil Production Fields	Area (Acres)	1,263	15	0	0	0			0
	gas oil wells	Count	27	16	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	4	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	5,495	15	25	1,813	499			3
	Natural Gas Pipeline	Length (ft)	13,697	15	0	3,287	0			0
	Natural Gas Wells	Count	2	4	-	0	0			0
	Residential - Duplex	Count	1	15	100	203	215			24
	Residential - Manuf. Housing	Count	5	15	100	215	223			24
	Residential - Single Family Dwelling	Count	36	15	100	9,831	10,454	13,043	21,346	24
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	4,657	9	25	931	256			6
	gas oil wells	Count	1	4	0	0	0			0
	Residential - Manuf. Housing	Count	1	9	100	30	31			24
	Residential - Single Family Dwelling	Count	1	9	47	188	106	393	1,149	22
Mandeville_Island	Delta Roads PBSJ Minor Roads	Length (ft)	26,062	23	25	5,212	1,433			6
	gas oil wells	Count	10	25	0	0	0	1,433	5,212	0
McCormack_Williamson_Tract	Communication HAZUS SDURS	Count	2	10	100	236	260			18
	Delta Roads PBSJ Minor Roads	Length (ft)	14,822	12	25	2,964	815			6
	Gas Oil Production Fields	Area (Acres)	885	12	0	0	0			0
	Gas Oil Production Fields	Area (Acres)	2,055	22	0	0	0			0
	gas oil wells	Count	20	12	0	0	0			0
	Natural Gas Pipeline	Length (ft)	4,699	12	0	893	0	1,075	4,093	0
McDonald_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	67,360	22	25	13,472	3,705			6
	gas oil wells	Count	105	20	0	0	0			0
	Natural Gas Pipeline	Length (ft)	20,905	22	0	6,376	0			0
	Residential - Institutional and Dormitory Housing	Count	3	22	100	16,398	17,437	21,141	36,246	24
McMullin_Ranch-River_Junction Tr	Commercial - Retail Trade	Count	1	9	34	60	38			12
	Delta Roads PBSJ Major Roads	Length (ft)	23,374	9	25	7,714	2,121			6
	Delta Roads PBSJ Minor Roads	Length (ft)	36,136	9	25	7,227	1,987			6
	gas oil wells	Count	2	9	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	9	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	11,554	9	0	3,004	0			0
	Residential - Manuf. Housing	Count	8	9	100	359	371			24
	Residential - Single Family Dwelling	Count	63	9	47	16,704	9,423			22
	transln_ca	Length (ft)	23,357	9	-	5,751	0	14,490	42,818	0
Medford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,314	19	25	5,663	1,557			6
	Residential - Institutional and Dormitory Housing	Count	1	19	100	2,897	3,080	4,637	8,559	24
Merritt Island	Commercial - Professional/ Technical Services	Count	1	14	100	776	854			18
	Commercial - Retail Trade	Count	1	14	100	170	187			18
	Delta Roads PBSJ Major Roads	Length (ft)	20,405	14	25	6,734	1,852			6
	Delta Roads PBSJ Minor Roads	Length (ft)	64,790	14	25	12,958	3,563			6
	Gas Oil Production Fields	Area (Acres)	185	14	0	0	0			0
	gas oil wells	Count	15	14	0	0	0			0
	Residential - Manuf. Housing	Count	4	14	100	269	279			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	14	100	180	191			24
	Residential - Single Family Dwelling	Count	76	14	100	19,739	20,989	27,914	40,825	24
Middle_Roberts_Island	Boatlaunch	Count	3	19	100	300	330			0
	bridges not in HAZUS	Count	1	12	25	500	138			3
	Commercial - Personal and Repair Services	Count	1	13	43	1,226	829			15

	Commercial - Professional/ Technical Services	Count	1	13	100	716	709			18
	Commercial - Retail Trade	Count	1	13	47	566	395			17
	Dams HAZUS SDURS	Count	1	9	0	0	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	27,590	13	25	9,105	2,504			6
	Delta Roads PBSJ Minor Roads	Length (ft)	303,675	13	25	60,735	16,702			6
	Gas Oil Production Fields	Area (Acres)	3,142	13	0	0	0			0
	gas oil wells	Count	104	12	0	0	0			0
	gas pipeline kinder morgan LS_9	Length (ft)	24,055	13	0	5,052	0			0
	Hwy Bridge HAZUS SDURS	Count	1	8	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	44,694	13	25	14,749	4,056			3
	mokelumne aqueduct pipe	Length (ft)	66,109	13	0	330,544	0			0
	Natural Gas Pipeline	Length (ft)	64,386	13	0	12,233	0			0
	Natural Gas Wells	Count	14	5	-	0	0			0
	Petroleum Pipelines	Length (ft)	9,151	13	0	1,922	0			0
	Rail HAZUS SDURS	Length (ft)	27,694	13	25	7,893	2,170			1
	Residential - Duplex	Count	8	13	100	3,419	3,635			24
	Residential - Institutional and Dormitory Housing	Count	6	13	34	36,474	18,376			16
	Residential - Manuf. Housing	Count	37	13	100	1,937	2,009			24
	Residential - Single Family Dwelling	Count	145	13	100	34,163	36,326			24
	Schools HAZUS SDURS	Count	1	18	100	1,180	1,194			18
Netherlands 1	solid waste facilities	Count	1	9	25	0	0			0
	transln_ca	Length (ft)	166,253	13	-	40,934	0	89,924	565,645	0
	Delta Roads PBSJ Minor Roads	Length (ft)	430	13	25	86	24			6
	Gas Oil Production Fields	Area (Acres)	221	13	0	0	0			0
	gas oil wells	Count	10	14	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,494	13	25	3,133	862			3
Netherlands 2	Residential - Multi-Dwellings- 10 to 19 units	Count	1	13	100	21	22			24
	Residential - Single Family Dwelling	Count	2	13	100	701	745	1,652	3,940	24
	air trans	Count	1	15	-	0	0			0
	Commercial - Professional/ Technical Services	Count	1	16	100	312	343			18
	Commercial - Retail Trade	Count	1	16	100	2,510	2,761			18
	Delta Roads PBSJ Major Roads	Length (ft)	25,540	16	25	8,428	2,318			6
	Delta Roads PBSJ Minor Roads	Length (ft)	326,219	16	25	65,244	17,942			6
	Fire Stations SDURS	Count	2	12	35	3,540	2,508			13
	Gas Oil Production Fields	Area (Acres)	885	16	0	0	0			0
	gas oil wells	Count	79	17	0	0	0			0
	Hazmat HAZUS SDURS	Count	1	13	-	0	0			0
	hc ambulatory	Count	1	20	100	0	0			18
	Hwy Bridge HAZUS SDURS	Count	1	2	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	70,321	16	25	23,206	6,382			3
	Natural Gas Wells	Count	1	18	-	0	0			0
	rail 1000 nodes	Count	4	17	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	7,594	16	25	2,164	595			1
	Residential - Institutional and Dormitory Housing	Count	1	16	100	6,960	7,401			24
	Residential - Manuf. Housing	Count	8	16	100	497	515			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	16	100	1,661	1,766			24
New_Hope_Tract	Residential - Single Family Dwelling	Count	294	16	100	77,970	82,908			24
	Schools HAZUS SDURS	Count	2	6	11	2,360	1,155			4
	solid waste facilities	Count	2	17	25	0	0	127,144	196,851	0
	Agriculture	Count	1	10	46	3,606	2,340			17
	Boatlaunch	Count	2	13	100	200	220			0
	Commercial - Professional/ Technical Services	Count	1	10	47	640	447			17
	Commercial - Retail Trade	Count	1	10	34	2,096	1,314			12
	Delta Roads PBSJ Major Roads	Length (ft)	30,583	10	25	10,092	2,775			6
	Delta Roads PBSJ Minor Roads	Length (ft)	70,404	10	25	14,081	3,872			6
	Gas Oil Production Fields	Area (Acres)	1,893	10	0	0	0			0
	gas oil wells	Count	66	11	0	0	0			0

	Hwy Bridge HAZUS SDURS	Count	3	8	25	6,000	1,650	36,508	88,106	3
	Hwy HAZUS SDURS	Length (ft)	20,018	10	25	6,606	1,817			3
	Natural Gas Pipeline	Length (ft)	44,655	10	0	8,485	0			0
	Natural Gas Wells	Count	3	12	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	5,103	10	25	1,454	400			1
	Residential - Duplex	Count	1	10	48	855	491			23
	Residential - Manuf. Housing	Count	100	10	100	5,171	5,346			24
	Residential - Single Family Dwelling	Count	137	10	47	28,071	15,835			22
	solid waste facilities	Count	1	3	25	0	0			0
	US cell towers	Count	3	6	-	750	0			0
	water trans	Count	1	9	-	0	0			0
Orwood_Tract	Commercial - Professional/ Technical Services	Count	1	16	100	768	845	55,377	251,172	18
	Commercial - Retail Trade	Count	1	16	100	54	59			18
	Delta Roads PBSJ Minor Roads	Length (ft)	24,805	16	25	4,961	1,364			6
	gas oil wells	Count	3	18	0	0	0			0
	gas pipeline kinder morgan LS 9	Length (ft)	14,840	16	0	3,116	0			0
	mokelumne aqueduct pipe	Length (ft)	40,546	16	-	202,729	16,948			1
	Natural Gas Pipeline	Length (ft)	6,497	16	0	1,819	0			0
	Residential - Manuf. Housing	Count	1	16	100	47	48			24
	Residential - Single Family Dwelling	Count	89	16	100	33,962	36,112			24
	transln ca	Length (ft)	11,544	16	-	3,717	0			0
Palm_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	24,442	17	25	4,888	1,344	6,973	22,562	6
	Gas Oil Production Fields	Area (Acres)	100	17	0	0	0			0
	gas oil wells	Count	3	18	0	0	0			0
	Natural Gas Pipeline	Length (ft)	27,094	17	0	7,586	0			0
	Rail HAZUS SDURS	Length (ft)	12,627	17	25	3,599	990			1
	Residential - Manuf. Housing	Count	2	17	100	102	106			24
	Residential - Single Family Dwelling	Count	13	17	100	4,263	4,533			24
	transln ca	Length (ft)	6,595	17	-	2,124	0			0
Paradise Junction	Delta Roads PBSJ Major Roads	Length (ft)	2,949	9	25	973	268	41,139	130,789	6
	Delta Roads PBSJ Minor Roads	Length (ft)	32,791	9	25	6,558	1,804			6
	gas oil wells	Count	7	10	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	10	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	1,557	9	25	514	141			3
	Natural Gas Wells	Count	1	12	-	0	0			0
	Prison	Count	1	5	15	25,000	4,125			5
	Rail HAZUS SDURS	Length (ft)	9,339	9	25	2,662	732			1
	Residential - Institutional and Dormitory Housing	Count	13	9	23	73,761	28,831			11
	Residential - Manuf. Housing	Count	1	9	100	69	71			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	9	48	15	9			23
	Residential - Single Family Dwelling	Count	25	9	47	5,246	2,959			22
	substation ca	Count	2	8	25	2,000	550			0
	transln ca	Length (ft)	32,461	9	-	7,992	0			0
	bridges not in HAZUS	Count	1	9	25	500	138			3
	Commercial - Professional/ Technical Services	Count	1	9	47	2,490	1,739			17
	Commercial - Retail Trade	Count	1	9	34	2,156	1,352			12
Pescadero	Delta Roads PBSJ Major Roads	Length (ft)	9,165	9	25	3,025	832			6
	Delta Roads PBSJ Minor Roads	Length (ft)	135,546	9	25	27,109	7,455			6
	Gas Oil Production Fields	Area (Acres)	21	9	0	0	0			0
	gas oil wells	Count	13	7	0	0	0			0
	Hazmat HAZUS SDURS	Count	7	4	-	0	0			0
	Hwy Bridge HAZUS SDURS	Count	13	9	25	26,000	7,150			3
	Hwy HAZUS SDURS	Length (ft)	29,651	9	25	9,785	2,691			3
	Natural Gas Pipeline	Length (ft)	5,130	9	0	975	0			0
	Petroleum Pipelines	Length (ft)	6,138	9	0	1,289	0			0
	Rail HAZUS SDURS	Length (ft)	256	9	25	73	20			1
	Residential - Manuf. Housing	Count	37	9	100	1,911	1,976			24

	Residential - Multi-Dwellings- 10 to 19 units	Count	1	9	48	614	352	81,456	225,692	23
	Residential - Single Family Dwelling	Count	167	9	47	43,877	24,751			22
	sewage treat	Count	1	8	30	100,000	33,000			12
	transln ca	Length (ft)	22,904	9	-	5,639	0			0
	US cell towers	Count	1	0	-	250	0			0
	utilities	Count	1	17	-	0	0			0
Peter Pocket	Gas Oil Production Fields	Area (Acres)	600	10	0	0	0	450	2,138	0
	gas oil wells	Count	9	10	0	0	0			0
	Natural Gas Pipeline	Length (ft)	5,700	10	0	1,083	0			0
	Natural Gas Wells	Count	3	11	-	0	0			0
	Residential - Manuf. Housing	Count	1	10	100	24	25			24
	Residential - Single Family Dwelling	Count	3	10	47	753	425			22
	transln ca	Length (ft)	864	10	-	278	0			0
Pico_Naglee_Tract	Commercial - Entertainment and Recreation	Count	6	10	26	12,606	7,349	206,610	388,892	9
	Commercial - Personal and Repair Services	Count	8	10	32	15,238	9,387			12
	Commercial - Professional and Technical Services	Count	2	10	47	34,168	23,866			17
	Commercial - Retail Trade	Count	2	10	34	49,796	31,222			12
	Commercial - Wholesale Trade	Count	6	10	29	29,286	17,557			10
	Delta Roads PBSJ Major Roads	Length (ft)	40,058	10	25	13,219	3,635			6
	Delta Roads PBSJ Minor Roads	Length (ft)	113,277	10	25	22,655	6,230			6
	gas oil wells	Count	14	9	0	0	0			0
	Hazmat HAZUS SDURS	Count	1	13	-	0	0			0
	hc ambulatory	Count	1	9	22	0	0			8
	hc nursing res	Count	1	8	18	0	0			9
	Hwy Bridge HAZUS SDURS	Count	3	4	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	3,464	10	25	1,143	314			3
	Industrial - Construction	Count	1	10	100	8,902	7,932			18
	Industrial - Heavy	Count	5	10	39	31,725	18,426			14
	Industrial - Light	Count	1	10	37	4,748	2,716			13
	Industrial - Metals, Minerals Processing	Count	1	10	42	13,658	8,113			15
	Natural Gas Pipeline	Length (ft)	42,028	10	0	7,985	0			0
	Police Stations HAZUS SDURS	Count	1	9	27	4,130	2,780			10
	rail 1000 nodes	Count	1	7	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	2,786	10	25	794	218			1
	Religion - Churches and other Non-Profit	Count	1	10	15	3,078	1,676			5
	Residential - Duplex	Count	2	10	48	1,235	709			23
	Residential - Manuf. Housing	Count	16	10	100	887	917			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	10	48	51	29			23
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	10	48	47	27			23
	Residential - Single Family Dwelling	Count	349	10	47	108,678	61,307			22
	substation ca	Count	2	7	25	2,000	550			0
	transln ca	Length (ft)	67,480	10	-	16,614	0			0
	US cell towers	Count	1	9	-	250	0			0
	utilities	Count	1	11	-	0	0			0
Pierson_Tract	Commercial - Personal and Repair Services	Count	2	16	100	3,320	3,652	206,610	388,892	18
	Commercial - Professional/ Technical Services	Count	1	16	100	2,298	2,528			18
	Commercial - Retail Trade	Count	1	16	100	998	1,098			18
	Communication HAZUS SDURS	Count	3	14	100	354	389			18
	Delta Roads PBSJ Major Roads	Length (ft)	14,424	16	25	4,760	1,309			6
	Delta Roads PBSJ Minor Roads	Length (ft)	111,143	16	25	22,229	6,113			6
	Fire Stations SDURS	Count	1	6	17	1,770	1,044			6
	Gas Oil Production Fields	Area (Acres)	322	16	0	0	0			0
	gas oil wells	Count	18	17	0	0	0			0
	hc ambulatory	Count	1	3	13	0	0			5
	Hwy Bridge HAZUS SDURS	Count	2	12	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	17,085	16	25	5,638	1,551			3
	Residential - Duplex	Count	2	16	100	1,524	1,621			24

Pittsburg	Residential - Manuf. Housing	Count	19	16	100	941	976	59,177	89,103	24
	Residential - Single Family Dwelling	Count	163	16	100	33,653	35,784			24
	Residential - Triplex-Quads	Count	1	16	100	624	664			24
	Schools HAZUS SDURS	Count	2	11	20	2,360	1,350			7
	transln ca	Length (ft)	18,825	16	-	4,635	0			0
	Commercial - Personal and Repair Services	Count	1	5	16	2,228	1,115			6
	Commercial - Professional/ Technical Services	Count	1	5	28	1,044	591			10
	Commercial - Retail Trade	Count	1	5	18	1,250	639			6
	Delta Roads PBSJ Major Roads	Length (ft)	6,213	5	25	2,050	564			6
	Delta Roads PBSJ Minor Roads	Length (ft)	4,125	5	25	825	227			6
	Industrial - Construction	Count	1	5	43	3,398	1,794			15
	Natural Gas Pipeline	Length (ft)	10,044	5	0	1,908	0			0
	Petroleum Pipelines	Length (ft)	5,423	5	0	1,139	0			0
	Port HAZUS SDURS	Count	1	9	0	2,572	0			0
	rail 1000 nodes	Count	4	3	-	0	0			0
	Rail Bridge HAZUS SDURS	Count	1	2	25	1,000	275			1
	Rail HAZUS SDURS	Length (ft)	14,710	5	25	4,192	1,153			1
	Residential - Duplex	Count	4	5	29	2,051	707			14
	Residential - Manuf. Housing	Count	1	5	100	56	56			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	5	29	1,653	570			14
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	5	29	731	252			14
	Residential - Single Family Dwelling	Count	98	5	29	27,960	9,791			14
	Residential - Triplex-Quads	Count	4	5	29	1,457	502			14
	substation ca	Count	1	4	25	1,000	275			0
	transln ca	Length (ft)	37,806	5	-	9,259	0			0
	utilities	Count	1	1	-	0	0			0
Prospect_Island	Delta Roads PBSJ Minor Roads	Length (ft)	5,398	15	25	1,080	297	1,050	1,788	6
	Gas Oil Production Fields	Area (Acres)	301	15	0	0	0			0
	gas oil wells	Count	11	12	0	0	0			0
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	15	100	2	2			24
	Residential - Single Family Dwelling	Count	2	15	100	707	751			24
Quimby_Island	bridges not in HAZUS	Count	1	15	25	500	138	271	626	3
	gas oil wells	Count	1	18	0	0	0			0
	Residential - Single Family Dwelling	Count	1	18	100	126	134			24
RD 17 (Mosssdale)	Boatlaunch	Count	3	1	100	300	330			0
	bridges not in HAZUS	Count	3	6	25	1,500	413			3
	Commercial - Banks	Count	1	5	15	848	429			5
	Commercial - Entertainment and Recreation	Count	2	5	16	3,306	1,691			6
	Commercial - Personal and Repair Services	Count	1	5	19	2,072	1,094			7
	Commercial - Professional/ Technical Services	Count	1	5	35	9,718	5,986			13
	Commercial - Retail Trade	Count	1	5	20	7,016	3,743			7
	Commercial - Wholesale Trade	Count	3	5	16	13,124	6,713			6
	Delta Roads PBSJ Major Roads	Length (ft)	39,252	5	25	12,953	3,562			6
	Delta Roads PBSJ Minor Roads	Length (ft)	303,437	5	25	60,687	16,689			6
	Gas Oil Production Fields	Area (Acres)	313	5	0	0	0			0
	gas oil wells	Count	17	3	0	0	0			0
	Hazmat HAZUS SDURS	Count	4	2	-	0	0			0
	hc ambulatory	Count	2	1	2	0	0			1
	Hwy Bridge HAZUS SDURS	Count	15	4	25	30,000	8,250			3
	Hwy HAZUS SDURS	Length (ft)	30,636	5	25	10,110	2,780			3
	Industrial - Heavy	Count	4	5	22	24,388	11,052			8
	Natural Gas Wells	Count	1	3	-	0	0			0
	Rail Facility HAZUS SDURS	Count	1	9	100	2,572	2,830			0
	Rail HAZUS SDURS	Length (ft)	8,867	5	25	2,527	695			1
	Residential - Duplex	Count	1	5	32	926	362			15
	Residential - Manuf. Housing	Count	218	5	100	11,447	11,584			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	5	32	56	22			15

	Residential - Multi-Dwellings- 20 to 49 units	Count	1	5	32	293	114	375,535	969,933	15
	Residential - Single Family Dwelling	Count	2,533	5	33	749,075	296,222			16
	Residential - Triplex-Quads	Count	1	5	32	1,790	699			15
	Schools HAZUS SDURS	Count	1	0	0	1,180	0			0
	substation ca	Count	1	8	25	1,000	275			0
	transln ca	Length (ft)	92,591	5	-	22,797	0			0
	US cell towers	Count	1	9	-	250	0			0
	utilities	Count	1	0	-	0	0			0
Rindge_Tract	Delta_Roads PBSJ Minor Roads	Length (ft)	85,006	20	25	17,001	4,675	6,017	18,516	6
	gas oil wells	Count	14	20	0	0	0			0
	Natural Gas Wells	Count	4	18	-	0	0			0
	Residential - Duplex	Count	1	20	100	287	305			24
	Residential - Manuf. Housing	Count	2	20	100	132	137			24
	Residential - Single Family Dwelling	Count	4	20	100	846	900			24
	US cell towers	Count	1	14	-	250	0			0
Rio_Blanco_Tract	Delta_Roads PBSJ Minor Roads	Length (ft)	2,927	8	25	585	161	1,212	9,988	6
	gas oil wells	Count	2	9	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	14	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	5,520	8	25	1,822	501			3
	transln ca	Length (ft)	22,668	8	-	5,581	0			0
Roberts_Island	Boatlaunch	Count	1	0	0	100	0	0	100	0
Rough_and_Ready_Island	air trans	Count	1	5	-	0	0	47,574	103,353	0
	Commercial - Entertainment and Recreation	Count	1	7	20	1,376	757			7
	Commercial - Personal and Repair Services	Count	1	7	25	2,564	1,481			9
	Commercial - Professional/ Technical Services	Count	1	7	41	510	339			15
	Commercial - Retail Trade	Count	1	7	26	1,558	908			9
	Commercial - Wholesale Trade	Count	3	7	22	12,596	7,066			8
	Delta_Roads PBSJ Major Roads	Length (ft)	8,461	7	25	2,792	768			6
	Delta_Roads PBSJ Minor Roads	Length (ft)	80,980	7	25	16,196	4,454			6
	gas oil wells	Count	1	9	0	0	0			0
	Government - General Services	Count	13	7	20	39,875	24,826			7
	Hazmat HAZUS SDURS	Count	3	3	-	0	0			0
	Industrial - Heavy	Count	1	7	30	4,280	2,203			11
	Petroleum Pipelines	Length (ft)	12,715	7	0	2,670	0			0
	rail 1000 nodes	Count	5	8	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	29,506	7	25	8,409	2,313			1
	Residential - Duplex	Count	3	7	43	1,026	521			21
	Residential - Manuf. Housing	Count	9	7	100	474	485			24
	Residential - Single Family Dwelling	Count	15	7	39	3,027	1,452			19
	tankfarms	Count	2	2	-	6,000	0			0
Ryer Island	Delta_Roads PBSJ Major Roads	Length (ft)	1,851	19	25	611	168	30,185	61,494	6
	Delta_Roads PBSJ Minor Roads	Length (ft)	116,940	19	25	23,388	6,432			6
	Gas Oil Production Fields	Area (Acres)	412	19	0	0	0			0
	gas oil wells	Count	22	18	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	12	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	56,501	19	25	18,645	5,127			3
	Natural Gas Wells	Count	3	19	-	0	0			0
	Residential - Manuf. Housing	Count	7	19	100	360	374			24
	Residential - Single Family Dwelling	Count	61	19	100	16,490	17,534			24
	tankfarms	Count	2	2	-	6,000	0			0
Sacramento_Pocket_Area	air trans	Count	11	6	-	0	0			0
	Airport Points	Count	2	4	25	0	0			0
	Boatlaunch	Count	3	16	100	300	330			0
	bridges not in HAZUS	Count	185	6	25	92,500	25,438			3
	Colleges and Universities	Count	2	9	15	46,370	28,768			5
	Commercial - Banks	Count	108	9	22	169,968	95,352			8
	Commercial - Entertainment and Recreation	Count	229	9	22	421,838	236,651			8
	Commercial - Hospitals	Count	4	9	43	140,178	100,535			15

	Commercial - Medical Clinics	Count	201	9	20	612,815	377,494		7
	Commercial - Personal and Repair Services	Count	152	9	28	369,818	219,672		10
	Commercial - Professional and Technical Services	Count	45	9	44	1,400,064	954,844		16
	Commercial - Retail Trade	Count	10	9	30	719,294	435,173		11
	Commercial - Theaters	Count	1	9	10	4,348	2,152		4
	Commercial - Wholesale Trade	Count	42	9	25	259,336	149,767		9
	Delta Roads PBSJ Major Roads	Length (ft)	686,061	9	25	226,400	62,260		6
	Delta Roads PBSJ Minor Roads	Length (ft)	3,118,576	9	25	623,715	171,522		6
	freeport pipe route preferred	Length (ft)	27,576	9	-	0	0		0
	gas oil wells	Count	15	12	0	0	0		0
	Government - General Services	Count	198	9	23	602,878	395,246		8
	hc ambulatory	Count	765	6	17	0	0		6
	hc hospital	Count	23	9	47	0	0		17
	hc nursing res	Count	66	7	16	0	0		8
	Hwy Bridge HAZUS SDURS	Count	14	13	25	28,000	7,700		3
	Hwy HAZUS SDURS	Length (ft)	130,656	9	25	43,117	11,857		3
	Industrial - Construction	Count	11	9	100	82,480	73,490		18
	Industrial - Heavy	Count	13	9	35	103,903	58,518		13
	Industrial - Light	Count	22	9	35	168,923	95,137		13
	intermodal terminal facilities	Count	1	4	-	0	0		0
	Natural Gas Pipeline	Length (ft)	81,042	9	0	26,339	0		0
	Petroleum Pipelines	Length (ft)	46,293	9	0	9,722	0		0
	rail 1000 nodes	Count	41	7	-	0	0		0
	Rail HAZUS SDURS	Length (ft)	2,252	9	25	642	177		1
	Religion - Churches and other Non-Profit	Count	64	9	14	389,094	209,722		5
	Residential - Duplex	Count	1,682	9	46	685,349	371,413		22
	Residential - Institutional and Dormitory Housing	Count	113	9	20	788,715	279,941		10
	Residential - Manuf. Housing	Count	1,233	9	100	65,087	67,299		24
	Residential - Multi-Dwellings - 10 to 19 units	Count	265	9	46	5,037	2,730		22
	Residential - Multi-Dwellings - 20 to 49 units	Count	18	9	46	17,250	9,348		22
	Residential - Multi-Dwellings - 5 to 9 units	Count	558	9	46	1,292,510	700,454		22
	Residential - Multi-Dwellings - 50+ units	Count	42	9	46	1,076,663	583,479		22
	Residential - Multi-Dwellings- 10 to 19 units	Count	265	9	46	932,772	505,500		22
	Residential - Nursing Home	Count	7	9	20	32,364	11,487		10
	Residential - Single Family Dwelling	Count	60,852	9	44	15,690,770	8,287,603		21
	Residential - Triplex-Quads	Count	1,595	9	46	710,390	384,984		22
	Schools HAZUS SDURS	Count	18	12	24	21,240	12,617		9
	sewage treat	Count	6	11	30	860,000	283,800		12
	solid waste facilities	Count	38	10	25	0	0		0
	substation ca	Count	8	7	25	8,000	2,200		0
	superfund sites	Count	1	12	-	0	0		0
	tankfarms	Count	3	10	-	9,000	0		0
	transln ca	Length (ft)	179,140	9	-	44,106	0		0
	US cell towers	Count	1	9	-	250	0		0
	utilities	Count	8	8	-	0	0	15,214,659	28,781,540
Sargent_Barnhart_Tract 1	Commercial - Professional/ Technical Services	Count	1	2	11	2	0		4
	Commercial - Retail Trade	Count	1	2	9	20	4		3
	Delta Roads PBSJ Minor Roads	Length (ft)	10,550	2	25	2,110	580		6
	gas pipeline kinder morgan LS 9	Length (ft)	4	2	0	1	0		0
	Residential - Duplex	Count	13	2	16	5,310	942		7
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	2	16	3,393	602		7
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	2	16	590	105		7
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	2	16	2,210	392		7
	Residential - Single Family Dwelling	Count	172	2	16	42,866	7,882		8
	Residential - Triplex-Quads	Count	6	2	16	2,889	513		7
Sargent_Barnhart_Tract 2	Schools HAZUS SDURS	Count	1	3	7	3,540	1,304	12,326	62,929
	air trans	Count	1	10	-	0	0		0

Commercial - Banks	Count	8	7	19	12,312	6,704			7
	Count	17	7	20	32,894	18,092			7
	Count	17	7	18	44,845	27,230			6
Commercial - Personal and Repair Services	Count	7	7	25	13,566	7,834			9
Commercial - Professional and Technical Services	Count	6	7	41	133,348	88,743			15
Commercial - Retail Trade	Count	1	7	26	20,294	11,831			9
Delta Roads PBSJ Major Roads	Length (ft)	4,901	7	25	1,617	445			6
Delta Roads PBSJ Minor Roads	Length (ft)	245,714	7	25	49,143	13,514			6
gas pipeline kinder morgan LS 9	Length (ft)	14,482	7	0	3,041	0			0
hc ambulatory	Count	98	5	16	0	0			6
hc hospital	Count	2	12	100	0	0			18
hc nursing res	Count	4	6	16	0	0			8
Hwy Bridge HAZUS SDURS	Count	10	5	25	20,000	5,500			3
Hwy HAZUS SDURS	Length (ft)	7,129	7	25	2,353	647			3
mokelumne aqueduct pipe	Length (ft)	43,147	7	0	215,736	0			0
Religion - Churches and other Non-Profit	Count	1	7	14	8,740	4,567			5
Residential - Duplex	Count	79	7	43	25,824	13,124			21
Residential - Institutional and Dormitory Housing	Count	1	7	18	6,704	2,178			9
Residential - Manuf. Housing	Count	23	7	100	1,515	1,550			24
Residential - Multi-Dwellings - 10 to 19 units	Count	1	7	43	830	422			21
Residential - Multi-Dwellings - 5 to 9 units	Count	29	7	43	68,052	34,584			21
Residential - Multi-Dwellings - 50+ units	Count	3	7	43	84,645	43,017			21
Residential - Multi-Dwellings- 10 to 19 units	Count	1	7	43	11,322	5,754			21
Residential - Multi-Dwellings- 20 to 49 units	Count	1	7	43	7,296	3,708			21
Residential - Single Family Dwelling	Count	3,660	7	39	1,162,187	557,598			19
Residential - Triplex-Quads	Count	84	7	43	36,522	18,560			21
Schools HAZUS SDURS	Count	6	6	10	7,080	3,349			4
substation ca	Count	1	11	25	1,000	275			0
transln ca	Length (ft)	10,183	7	-	2,507	0	869,224	1,973,371	0
Sargent_Barnhart_Tract 3	Boatlaunch	Count	1	9	100	110			0
	Commercial - Entertainment and Recreation	Count	5	10	26	1,572			9
	Commercial - Personal and Repair Services	Count	1	10	32	9,216			12
	Commercial - Professional/ Technical Services	Count	1	10	47	4,870			17
	Commercial - Retail Trade	Count	1	10	34	300			12
	Delta Roads PBSJ Minor Roads	Length (ft)	1,583	10	25	317			6
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	10	48	830			23
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	10	48	95			23
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	10	48	137			23
	Residential - Single Family Dwelling	Count	29	10	47	8,949			22
	Residential - Triplex-Quads	Count	1	10	48	267			23
Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Length (ft)	12,297	9	25	2,459	16,191	26,651	6
	gas oil wells	Count	1	9	0	0			0
	Residential - Single Family Dwelling	Count	2	9	47	621	1,027	3,080	22
Sherman_Island	Boatlaunch	Count	3	8	100	300			0
	Commercial - Professional/ Technical Services	Count	1	19	100	276			18
	Commercial - Retail Trade	Count	1	19	100	960			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,521	19	25	502			6
	Delta Roads PBSJ Minor Roads	Length (ft)	87,988	19	25	17,598			6
	Gas Oil Production Fields	Area (Acres)	1,086	19	0	0			0
	gas oil wells	Count	60	18	0	0			0
	Hwy HAZUS SDURS	Length (ft)	38,217	19	25	12,611			3
	Natural Gas Pipeline	Length (ft)	145,514	19	0	48,020			0
	Natural Gas Wells	Count	4	15	-	0			0
	Residential - Duplex	Count	1	19	100	645			24
	Residential - Manuf. Housing	Count	46	19	100	2,366			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	19	100	113			24
	Residential - Single Family Dwelling	Count	39	19	100	8,109			24

Shima_Tract	Residential - Triplex-Quads	Count	1	19	100	485	515	22,533	114,940	24
	transn_ca	Length (ft)	71,301	19	-	22,957	0			0
	Commercial - Entertainment and Recreation	Count	5	9	22	2,030	1,139			8
	Commercial - Medical Clinics	Count	1	9	20	2,415	1,488			7
	Commercial - Personal and Repair Services	Count	3	9	28	5,424	3,222			10
	Commercial - Professional and Technical Services	Count	1	9	44	20,154	13,745			16
	Commercial - Retail Trade	Count	1	9	30	9,212	5,573			11
	Delta Roads PBSJ Major Roads	Length (ft)	4,694	9	25	1,549	426			6
	Delta Roads PBSJ Minor Roads	Length (ft)	139,179	9	25	27,836	7,655			6
	gas oil wells	Count	1	4	0	0	0			0
	hc ambulatory	Count	10	5	16	0	0			6
	hc hospital	Count	1	5	25	0	0			9
	hc nursing res	Count	2	4	15	0	0			7
	Hwy Bridge HAZUS SDURS	Count	1	4	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	7,177	9	25	2,369	651			3
	Residential - Duplex	Count	63	9	46	25,154	13,632			22
	Residential - Institutional and Dormitory Housing	Count	1	9	20	5,472	1,942			10
	Residential - Multi-Dwellings - 10 to 19 units	Count	4	9	46	7,550	4,091			22
	Residential - Multi-Dwellings - 5 to 9 units	Count	34	9	46	72,285	39,174			22
	Residential - Multi-Dwellings - 50+ units	Count	4	9	46	61,698	33,436			22
	Residential - Multi-Dwellings- 10 to 19 units	Count	4	9	46	13,050	7,072			22
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	9	46	3,923	2,126			22
	Residential - Single Family Dwelling	Count	2,706	9	44	681,659	360,041			21
	Residential - Triplex-Quads	Count	83	9	46	36,120	19,575			22
	Schools HAZUS SDURS	Count	1	2	5	10,620	2,804			2
	transn_ca	Length (ft)	28,920	9	-	7,120	0	518,341	997,638	0
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	8,821	8	25	1,764	485	1,212	12,324	6
	gas oil wells	Count	4	8	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	8,005	8	25	2,642	726			3
	transn_ca	Length (ft)	32,162	8	-	7,919	0			0
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Count	1	7	37	252	113	113	252	18
SM-123	Delta Roads PBSJ Major Roads	Length (ft)	4,064	6	25	1,341	369	5,544	20,683	6
	Delta Roads PBSJ Minor Roads	Length (ft)	20,924	6	25	4,185	1,151			6
	gas oil wells	Count	4	5	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	4	3	25	8,000	2,200			3
	Hwy HAZUS SDURS	Length (ft)	2,607	6	25	860	237			3
	intermodal terminal facilities	Count	1	2	-	0	0			0
	Natural Gas Pipeline	Length (ft)	2,479	6	0	471	0			0
	Petroleum Pipelines	Length (ft)	3,045	6	0	639	0			0
	rail 1000 nodes	Count	1	2	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	3,085	6	25	879	242			1
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	6	39	245	112			18
	Residential - Single Family Dwelling	Count	13	6	37	2,414	1,078			18
	Residential - Triplex-Quads	Count	1	6	39	341	156			18
	transn_ca	Length (ft)	5,315	6	-	1,309	0			0
	Commercial - Entertainment and Recreation	Count	4	5	14	2,404	1,177			5
	Commercial - Personal and Repair Services	Count	3	5	16	816	408			6
	Commercial - Professional and Technical Services	Count	1	5	28	30,882	17,495			10
	Commercial - Retail Trade	Count	1	5	18	13,376	6,842			6
SM-124	Commercial - Wholesale Trade	Count	1	5	13	3,434	1,662			5
	Delta Roads PBSJ Major Roads	Length (ft)	8,486	5	25	2,800	770			6
	Delta Roads PBSJ Minor Roads	Length (ft)	49,676	5	25	9,935	2,732			6
	gas oil wells	Count	1	4	0	0	0			0
	Government - General Services	Count	2	5	12	6,338	3,304			4
	hc ambulatory	Count	4	2	12	0	0			4
	hc nursing res	Count	1	4	15	0	0			7
	Hwy Bridge HAZUS SDURS	Count	1	2	25	2,000	550			3

	Hwy HAZUS SDURS	Length (ft)	4,224	5	25	1,394	383				3
	Natural Gas Pipeline	Length (ft)	4,077	5	0	775	0				0
	Petroleum Pipelines	Length (ft)	38,775	5	0	8,143	0				0
	Police Stations HAZUS SDURS	Count	1	3	10	4,130	1,681				4
	rail 1000 nodes	Count	4	2	-	0	0				0
	Rail Facility HAZUS SDURS	Count	1	1	25	2,572	707				0
	Rail HAZUS SDURS	Length (ft)	29,822	5	25	8,499	2,337				1
	Residential - Duplex	Count	21	5	29	9,294	3,203				14
	Residential - Manuf. Housing	Count	54	5	100	2,814	2,817				24
	Residential - Multi-Dwellings - 10 to 19 units	Count	1	5	29	3,393	1,169				14
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	5	29	7,550	2,602				14
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	5	29	3,294	1,135				14
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	5	29	10,146	3,497				14
	Residential - Single Family Dwelling	Count	536	5	29	138,908	48,641				14
	Residential - Triplex-Quads	Count	37	5	29	16,125	5,558				14
	Schools HAZUS SDURS	Count	3	3	9	1,180	448				3
	sewage treat	Count	2	4	30	175,000	57,750				12
	substation ca	Count	1	4	25	1,000	275				0
	transln ca	Length (ft)	13,589	5	-	3,346	0	167,145	469,547		0
SM-132	gas oil wells	Count	1	9	0	0	0				0
	Residential - Single Family Dwelling	Count	1	9	44	263	139	139	263		21
SM-133	Gas Oil Production Fields	Area (Acres)	203	4	0	0	0				0
	gas oil wells	Count	9	2	0	0	0	0	0		0
SM-134	Gas Oil Production Fields	Area (Acres)	1	4	0	0	0				0
	gas oil wells	Count	1	6	0	0	0	0	0		0
SM-198	Commercial - Retail Trade	Count	1	10	34	2	1				12
	Delta Roads PBSJ Minor Roads	Length (ft)	3,875	10	25	775	213				6
	gas oil wells	Count	3	9	0	0	0				0
	Natural Gas Pipeline	Length (ft)	4,379	10	0	832	0				0
	Petroleum Pipelines	Length (ft)	5,484	10	0	1,152	0				0
	Rail HAZUS SDURS	Length (ft)	1,008	10	25	287	79				1
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	10	48	33	19				23
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	10	48	36	21				23
	Residential - Single Family Dwelling	Count	5	10	47	1,404	792	1,125	4,521		22
SM-199	Communication HAZUS SDURS	Count	1	7	100	118	130				18
	Delta Roads PBSJ Minor Roads	Length (ft)	3,987	8	25	797	219				6
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	8	46	15	8				22
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	8	46	15	8				22
	Residential - Single Family Dwelling	Count	2	8	44	675	357	722	1,620		21
SM-202	Residential - Single Family Dwelling	Count	1	7	39	266	127	127	266		19
SM-39	Commercial - Professional/ Technical Services	Count	1	5	28	92	52				10
	Commercial - Retail Trade	Count	1	5	18	254	130				6
	Delta Roads PBSJ Major Roads	Length (ft)	4,675	5	25	1,543	424				6
	Delta Roads PBSJ Minor Roads	Length (ft)	13,304	5	25	2,661	732				6
	Hwy Bridge HAZUS SDURS	Count	3	2	25	6,000	1,650				3
	Rail HAZUS SDURS	Length (ft)	3,726	5	25	1,062	292				1
	Residential - Single Family Dwelling	Count	6	5	29	1,739	609				14
	transln ca	Length (ft)	13,355	5	-	3,288	0	3,889	16,638		0
SM-40	Delta Roads PBSJ Minor Roads	Length (ft)	7,779	6	25	1,556	428	428	1,556		6
SM-41	Commercial - Professional/ Technical Services	Count	1	7	38	4	3				14
	Commercial - Retail Trade	Count	1	7	23	72	41				8
	Delta Roads PBSJ Minor Roads	Length (ft)	373	7	25	75	21				6
	Petroleum Pipelines	Length (ft)	10,066	7	0	2,114	0				0
	Rail HAZUS SDURS	Length (ft)	5,568	7	25	1,587	436	500	3,851		1
SM-42	substation ca	Count	1	4	25	1,000	275				0
	transln ca	Length (ft)	3,060	4	-	753	0	275	1,753		0
SM-43	Gas Oil Production Fields	Area (Acres)	94	7	0	0	0				0

	gas oil wells	Count	6	4	0	0	0			0
	Residential - Single Family Dwelling	Count	1	7	37	252	113	113	252	18
SM-44	Delta Roads PBSJ Minor Roads	Length (ft)	11,682	5	25	2,336	642			6
	Residential - Single Family Dwelling	Count	7	5	33	2,046	809			16
	transln ca	Length (ft)	5,355	5	-	1,318	0	1,452	5,701	0
SM-46	Commercial - Retail Trade	Count	1	7	26	6	3			9
	Delta Roads PBSJ Minor Roads	Length (ft)	2,339	7	25	468	129	132	474	6
SM-47	solid waste facilities	Count	1	5	25	0	0	0	0	0
SM-48	Commercial - Entertainment and Recreation	Count	1	7	18	15,004	8,087			6
	Commercial - Professional/ Technical Services	Count	1	7	38	1,832	1,189			14
	Commercial - Retail Trade	Count	2	7	23	32,612	18,475			8
	gas oil wells	Count	2	6	0	0	0			0
	Petroleum Pipelines	Length (ft)	21,217	7	0	4,455	0			0
	Rail HAZUS SDURS	Length (ft)	10,405	7	25	2,965	815	28,566	56,869	1
SM-49	Commercial - Entertainment and Recreation	Count	1	7	18	8,202	4,421			6
	Commercial - Professional/ Technical Services	Count	1	7	38	8,276	5,371			14
	Commercial - Retail Trade	Count	1	7	23	9,038	5,120			8
	Commercial - Wholesale Trade	Count	2	7	19	8,272	4,504			7
	Delta Roads PBSJ Minor Roads	Length (ft)	17,086	7	25	3,417	940			6
	Hwy HAZUS SDURS	Length (ft)	3,040	7	25	1,003	276			3
	Industrial - Light	Count	1	7	30	5,843	2,969			11
	Petroleum Pipelines	Length (ft)	19,582	7	0	4,112	0			0
	Rail HAZUS SDURS	Length (ft)	9,851	7	25	2,808	772			1
	Residential - Single Family Dwelling	Count	9	7	37	2,720	1,215	25,588	53,690	18
SM-51	Gas Oil Production Fields	Area (Acres)	2	5	0	0	0	0	0	0
SM-52	Commercial - Retail Trade	Count	1	5	20	126	68			7
	Delta Roads PBSJ Minor Roads	Length (ft)	7,653	5	25	1,531	421			6
	Gas Oil Production Fields	Area (Acres)	192	5	0	0	0			0
	gas oil wells	Count	8	6	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	3	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	686	5	25	226	62			3
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	5	32	5	2			15
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	5	32	5	2			15
	Residential - Single Family Dwelling	Count	3	5	33	693	274	1,379	4,585	16
SM-53	Commercial - Retail Trade	Count	1	4	16	56	26			6
	Delta Roads PBSJ Minor Roads	Length (ft)	53	4	25	11	3			6
	Gas Oil Production Fields	Area (Acres)	179	4	0	0	0			0
	gas oil wells	Count	3	3	0	0	0			0
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	4	26	2	0			12
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	4	26	2	0	30	70	12
SM-54	Commercial - Personal and Repair Services	Count	2	6	19	1,252	668			7
	Commercial - Professional/ Technical Services	Count	1	6	35	11,032	6,856			13
	Commercial - Retail Trade	Count	1	6	20	10,634	5,732			7
	Commercial - Wholesale Trade	Count	5	6	16	25,244	13,051			6
	Delta Roads PBSJ Major Roads	Length (ft)	3,186	6	25	1,051	289			6
	Delta Roads PBSJ Minor Roads	Length (ft)	28,636	6	25	5,727	1,575			6
	gas oil wells	Count	5	5	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	3	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	3,020	6	25	996	274			3
	Industrial - Construction	Count	2	6	47	8,880	4,982			17
	Industrial - Heavy	Count	3	6	22	26,893	12,365			8
	Natural Gas Pipeline	Length (ft)	460	6	0	87	0			0
	Petroleum Pipelines	Length (ft)	48,352	6	0	10,154	0			0
	rail 1000 nodes	Count	5	2	-	0	0			0
	Rail Facility HAZUS SDURS	Count	1	0	0	2,572	0			0
	Rail HAZUS SDURS	Length (ft)	50,708	6	25	14,452	3,974			1
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	6	32	9	4			15

SM-55	Residential - Multi-Dwellings- 20 to 49 units	Count	1	6	32	5	2	52,467	127,632	15
	Residential - Single Family Dwelling	Count	9	6	33	2,643	1,045			16
	solid waste facilities	Count	1	2	25	0	0			0
	Delta Roads PBSJ Minor Roads	Length (ft)	14,381	10	25	2,876	791			6
	Natural Gas Pipeline	Length (ft)	4,432	10	0	842	0			0
SM-56	Petroleum Pipelines	Length (ft)	4,424	10	0	929	0	1,110	5,213	0
	Residential - Single Family Dwelling	Count	2	10	47	566	319			22
	Delta Roads PBSJ Minor Roads	Length (ft)	5,417	7	25	1,083	298			6
	gas oil wells	Count	2	6	0	0	0			0
	Natural Gas Pipeline	Length (ft)	5,028	7	0	955	0			0
SM-57	Petroleum Pipelines	Length (ft)	3,100	7	0	651	0	776	3,759	0
	Residential - Single Family Dwelling	Count	3	7	37	1,070	478			18
	bridges not in HAZUS	Count	1	2	25	500	138			3
	Delta Roads PBSJ Major Roads	Length (ft)	36	4	25	12	3			6
	Delta Roads PBSJ Minor Roads	Length (ft)	9,872	4	25	1,974	543			6
SM-58	hc ambulatory	Count	2	2	11	0	0	3,666	15,680	4
	Hwy Bridge HAZUS SDURS	Count	1	3	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	2,242	4	25	740	203			3
	Natural Gas Pipeline	Length (ft)	5,915	4	0	1,124	0			0
	Residential - Single Family Dwelling	Count	19	4	29	6,366	2,229			14
SM-59	solid waste facilities	Count	1	4	25	0	0	211	768	0
	transIn ca	Length (ft)	12,039	4	-	2,964	0			0
	water trans	Count	1	2	-	0	0			0
	Delta Roads PBSJ Minor Roads	Length (ft)	3,840	6	25	768	211			6
	Delta Roads PBSJ Minor Roads	Length (ft)	291	5	25	58	16			6
SM-60	Gas Oil Production Fields	Area (Acres)	275	5	0	0	0	513	1,789	0
	gas oil wells	Count	9	4	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	4,382	5	25	1,446	398			3
	Residential - Single Family Dwelling	Count	1	5	29	285	100			14
	Commercial - Entertainment and Recreation	Count	1	3	12	11,314	4,605			4
SM-84	Commercial - Personal and Repair Services	Count	1	3	13	5,008	2,066	9,663	24,170	5
	Commercial - Professional/ Technical Services	Count	1	3	22	3,396	1,569			8
	Commercial - Retail Trade	Count	1	3	16	1,212	520			6
	Delta Roads PBSJ Minor Roads	Length (ft)	4,004	3	25	801	220			6
	gas oil wells	Count	3	1	0	0	0			0
SM-85-Grizzly_Island	Hwy Bridge HAZUS SDURS	Count	1	8	25	2,000	550	5,090	15,093	3
	Residential - Single Family Dwelling	Count	2	3	26	440	133			12
	Commercial - Retail Trade	Count	1	8	30	162	98			11
	Delta Roads PBSJ Minor Roads	Length (ft)	57,166	8	25	11,433	3,144			6
	Gas Oil Production Fields	Area (Acres)	9	8	0	0	0			0
Smith_Tract	gas oil wells	Count	9	8	0	0	0	3,293	16,932	0
	Residential - Single Family Dwelling	Count	11	8	44	3,498	1,848			21
	Delta Roads PBSJ Minor Roads	Length (ft)	45,162	7	25	9,032	2,484			6
	Gas Oil Production Fields	Area (Acres)	190	7	0	0	0			0
	gas oil wells	Count	12	7	0	0	0			0
SM-85-Grizzly_Island	Natural Gas Pipeline	Length (ft)	30,134	7	0	5,726	0	3,293	16,932	0
	Petroleum Pipelines	Length (ft)	2,326	7	0	488	0			0
	Residential - Single Family Dwelling	Count	5	7	39	1,686	809			19
	Commercial - Entertainment and Recreation	Count	5	4	14	7,726	3,654			5
	Commercial - Personal and Repair Services	Count	5	4	16	11,508	5,570			6
SM-85-Grizzly_Island	Commercial - Professional/ Technical Services	Count	1	4	28	4,708	2,589	3,293	16,932	10
	Commercial - Retail Trade	Count	1	4	18	12,350	6,113			6
	Delta Roads PBSJ Major Roads	Length (ft)	19,013	4	25	6,274	1,725			6
	Delta Roads PBSJ Minor Roads	Length (ft)	218,778	4	25	43,756	12,033			6
	hc ambulatory	Count	6	4	13	0	0			5
SM-85-Grizzly_Island	hc nursing res	Count	1	9	20	0	0	3,293	16,932	10
	Hwy Bridge HAZUS SDURS	Count	9	2	25	18,000	4,950			3

	Hwy HAZUS SDURS	Length (ft)	6,635	4	25	2,190	602	490,073	1,401,180	3
	Religion - Churches and other Non-Profit	Count	1	4	12	4,602	1,266			4
	Residential - Duplex	Count	31	4	29	14,154	4,878			14
	Residential - Manuf. Housing	Count	14	4	100	909	900			24
	Residential - Multi-Dwellings - 10 to 19 units	Count	3	4	29	72,285	24,914			14
	Residential - Multi-Dwellings - 20 to 49 units	Count	1	4	29	68,052	23,455			14
	Residential - Multi-Dwellings - 5 to 9 units	Count	3	4	29	17,250	5,946			14
	Residential - Multi-Dwellings - 50+ units	Count	3	4	29	54,713	18,858			14
	Residential - Multi-Dwellings- 10 to 19 units	Count	3	4	29	15,125	5,213			14
	Residential - Single Family Dwelling	Count	4,093	4	29	1,030,175	360,733			14
	Residential - Triplex-Quads	Count	10	4	29	10,325	3,559			14
	Schools_HAZUS_SDURS	Count	6	5	9	7,080	3,115			3
Stark_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	280	9	25	56	15	282	5,199	6
	gas_oil_wells	Count	1	10	0	0	0			0
	Natural Gas Pipeline	Length (ft)	4,943	9	0	939	0			0
	Residential - Single Family Dwelling	Count	2	9	44	504	266			21
	transln_ca	Length (ft)	15,026	9	-	3,700	0			0
Staten_Island	Commercial - Retail Trade	Count	1	23	100	246	271	4,655	20,596	18
	Delta Roads PBSJ Major Roads	Length (ft)	4,422	23	25	1,459	401			6
	Delta Roads PBSJ Minor Roads	Length (ft)	46,221	23	25	9,244	2,542			6
	Gas Oil Production Fields	Area (Acres)	1,623	23	0	0	0			0
	gas_oil_wells	Count	34	21	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	20	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	26,158	23	0	6,801	0			0
	Natural Gas Wells	Count	4	17	-	0	0			0
	Residential - Manuf. Housing	Count	7	23	100	329	341			24
	Residential - Single Family Dwelling	Count	3	23	100	518	550			24
	transln_ca	Length (ft)	29,191	7	-	7,187	0			0
Stewart_Tract	Commercial - Professional/ Technical Services	Count	1	7	41	338	225	17,160	53,787	15
	Commercial - Retail Trade	Count	1	7	26	1,150	670			9
	Delta Roads PBSJ Minor Roads	Length (ft)	61,565	7	25	12,313	3,386			6
	gas_oil_wells	Count	7	8	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	6	8	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	7,634	7	25	2,519	693			3
	Rail HAZUS SDURS	Length (ft)	4,671	7	25	1,331	366			1
	Residential - Manuf. Housing	Count	13	7	100	702	718			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	7	43	228	116			21
	Residential - Single Family Dwelling	Count	62	7	39	16,019	7,685			19
	transln_ca	Length (ft)	29,191	7	-	7,187	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	3,515	15	25	1,160	319	15,774	26,333	6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,251	15	25	12,650	3,479			6
Sutter Island	Gas Oil Production Fields	Area (Acres)	27	5	0	0	0			0
	Gas Oil Production Fields	Area (Acres)	656	18	0	0	0			0
	gas_oil_wells	Count	5	15	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	5,145	15	25	1,698	467			3
	Residential - Manuf. Housing	Count	2	15	100	60	62			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	15	100	510	542			24
	Residential - Single Family Dwelling	Count	38	15	100	10,256	10,905			24
	transln_ca	Length (ft)	29,191	7	-	7,187	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	3,515	15	25	1,160	319	15,774	26,333	6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,251	15	25	12,650	3,479			6
Terminusus_Tract 1	Gas Oil Production Fields	Area (Acres)	27	5	0	0	0			0
	Gas Oil Production Fields	Area (Acres)	656	18	0	0	0			0
	gas_oil_wells	Count	5	15	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	5	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	15,540	5	25	5,128	1,410			3
	Natural Gas Pipeline	Length (ft)	651	5	0	150	0			0
	Residential - Manuf. Housing	Count	12	5	100	630	638			24
	Residential - Single Family Dwelling	Count	6	5	33	1,103	436			16
	transln_ca	Length (ft)	29,191	7	-	7,187	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	3,515	15	25	1,160	319			6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,251	15	25	12,650	3,479			6
	Gas Oil Production Fields	Area (Acres)	27	5	0	0	0			0
	Gas Oil Production Fields	Area (Acres)	656	18	0	0	0			0

	Schools HAZUS SDURS	Count	1	4	9	1,180	305				3
	transln ca	Length (ft)	31,244	5	-	7,693	0	6,676	29,423		0
Terminous_Tract 2	Agriculture	Count	1	18	100	2,270	2,147				18
	Boatlaunch	Count	1	22	100	100	110				0
	Commercial - Professional/ Technical Services	Count	1	18	100	172	189				18
	Commercial - Retail Trade	Count	1	18	100	1,282	1,410				18
	Commercial - Wholesale Trade	Count	1	18	100	4,062	4,468				18
	Delta Roads PBSJ Major Roads	Length (ft)	3,608	18	25	1,190	327				6
	Delta Roads PBSJ Minor Roads	Length (ft)	93,423	18	25	18,685	5,138				6
	gas oil wells	Count	21	17	0	0	0				0
	Hwy Bridge HAZUS SDURS	Count	1	13	25	2,000	550				3
	Hwy HAZUS SDURS	Length (ft)	24,235	18	25	7,998	2,199				3
	Natural Gas Wells	Count	1	14	-	0	0				0
	Residential - Duplex	Count	2	18	100	855	909				24
	Residential - Manuf. Housing	Count	191	18	100	9,783	10,151				24
	Residential - Single Family Dwelling	Count	75	18	100	15,390	16,365				24
US cell towers	Count	1	19	-	250	0	43,965	64,037		0	
Terminous_Tract 3	Delta Roads PBSJ Minor Roads	Length (ft)	251	10	25	50	14				6
	Residential - Manuf. Housing	Count	7	10	100	345	357				24
	Residential - Single Family Dwelling	Count	3	10	47	545	307	678	940		22
Twitchell_Island	Delta Roads PBSJ Minor Roads	Length (ft)	26,529	21	25	5,306	1,459				6
	Gas Oil Production Fields	Area (Acres)	2,199	21	0	0	0				0
	gas oil wells	Count	35	20	0	0	0				0
	Natural Gas Pipeline	Length (ft)	8,803	21	0	2,025	0				0
	Natural Gas Wells	Count	19	21	-	0	0				0
	Residential - Duplex	Count	1	21	100	396	421				24
	Residential - Manuf. Housing	Count	28	21	100	1,446	1,500				24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	21	100	71	75				24
	Residential - Single Family Dwelling	Count	24	21	100	4,956	5,270				24
	Residential - Triplex-Quads	Count	1	21	100	294	313	9,038	14,493		24
Tyler_Island 2	Airports HAZUS SDURS	Count	1	19	25	6,431	1,769				3
	Delta Roads PBSJ Major Roads	Length (ft)	5,160	20	25	1,703	468				6
	Delta Roads PBSJ Minor Roads	Length (ft)	167,781	20	25	33,556	9,228				6
	Gas Oil Production Fields	Area (Acres)	4,215	20	0	0	0				0
	gas oil wells	Count	96	20	0	0	0				0
	Hwy Bridge HAZUS SDURS	Count	1	13	25	2,000	550				3
	Natural Gas Pipeline	Length (ft)	35,509	20	0	7,457	0				0
	Natural Gas Wells	Count	13	23	-	0	0				0
	Residential - Manuf. Housing	Count	2	20	100	245	254				24
	Residential - Single Family Dwelling	Count	17	20	100	4,800	5,104				24
	Runway HAZUS SDURS	Count	1	6	25	36,674	10,085				0
	solid waste facilities	Count	1	7	25	0	0	27,458	92,866		0
Union_Island 1	Dams HAZUS SDURS	Count	1	16	0	0	0				0
	Delta Roads PBSJ Major Roads	Length (ft)	50,136	12	25	16,545	4,550				6
	Delta Roads PBSJ Minor Roads	Length (ft)	215,215	12	25	43,043	11,837				6
	Gas Oil Production Fields	Area (Acres)	2,959	12	0	0	0				0
	gas oil wells	Count	51	10	0	0	0				0
	Natural Gas Pipeline	Length (ft)	63,467	12	0	12,059	0				0
	Natural Gas Wells	Count	15	9	-	0	0				0
	Residential - Duplex	Count	3	12	100	1,284	1,365				24
	Residential - Institutional and Dormitory Housing	Count	4	12	34	24,144	12,164				16
	Residential - Manuf. Housing	Count	19	12	100	830	861				24
	Residential - Single Family Dwelling	Count	75	12	100	18,996	20,199				24
	Schools HAZUS SDURS	Count	1	13	28	1,180	727				10
	transln ca	Length (ft)	123,471	12	-	30,400	0				0
	US cell towers	Count	1	13	-	250	0	51,702	148,730		0
Union_Island 2	Delta Roads PBSJ Minor Roads	Length (ft)	415	6	25	83	23				0

	Gas Oil Production Fields	Area (Acres)	0	6	0	0	0	23	574	0
	Natural Gas Pipeline	Length (ft)	2,582	6	0	491	0			0
Union_Island 3	Delta Roads PBSJ Minor Roads	Length (ft)	4,733	9	25	947	260	545	6,773	6
	gas oil wells	Count	4	9	0	0	0			0
	Natural Gas Pipeline	Length (ft)	6,943	9	0	1,319	0			0
	Residential - Single Family Dwelling	Count	2	9	44	539	284			21
	transln_ca	Length (ft)	16,118	9	-	3,968	0			0
Union_Island 4	Delta Roads PBSJ Minor Roads	Length (ft)	2,456	6	25	491	135	135	686	6
	Gas Oil Production Fields	Area (Acres)	70	6	0	0	0			0
	gas oil wells	Count	3	5	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,028	6	0	195	0			0
Upper_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	140,196	5	25	28,039	7,711	13,433	63,146	6
	Gas Oil Production Fields	Area (Acres)	1,278	5	0	0	0			0
	gas oil wells	Count	32	5	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	7	25	2,000	550			3
	Natu Gas HAZUS SDURS	Count	1	7	0	1,286	0			0
	Natural Gas Pipeline	Length (ft)	21,809	5	0	4,144	0			0
	Natural Gas Wells	Count	18	5	-	0	0			0
	Residential - Manuf. Housing	Count	4	5	100	242	244			24
	Residential - Single Family Dwelling	Count	48	5	33	12,462	4,928			16
	transln_ca	Length (ft)	60,815	5	-	14,973	0			0
Van_Sickle_Island	Gas Oil Production Fields	Area (Acres)	292	9	0	0	0	33,428	100,810	0
	gas oil wells	Count	16	9	0	0	0			0
	Residential - Single Family Dwelling	Count	3	9	44	810	428			21
	sewage treat	Count	1	8	30	100,000	33,000			12
Veale_Tract 1	Commercial - Professional/ Technical Services	Count	1	10	47	336	235	7,575	21,936	17
	Commercial - Retail Trade	Count	1	10	34	104	65			12
	Delta Roads PBSJ Minor Roads	Length (ft)	7,133	10	25	1,427	392			6
	Gas Oil Production Fields	Area (Acres)	85	10	0	0	0			0
	gas oil wells	Count	6	10	0	0	0			0
	Residential - Manuf. Housing	Count	6	10	100	320	330			24
	Residential - Single Family Dwelling	Count	37	10	47	11,615	6,552			22
	transln_ca	Length (ft)	25,269	10	-	8,136	0			0
Veale_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	118	7	25	24	6	1,864	6,038	6
	Natural Gas Pipeline	Length (ft)	7	7	0	1	0			0
	Residential - Institutional and Dormitory Housing	Count	1	7	16	5,378	1,573			8
	Residential - Single Family Dwelling	Count	2	7	37	636	284			18
Venice_Island	Delta Roads PBSJ Minor Roads	Length (ft)	66,238	24	25	13,248	3,643	3,705	13,308	6
	gas oil wells	Count	4	26	0	0	0			0
	Residential - Manuf. Housing	Count	2	24	100	60	62			24
Victoria_Island	Delta Roads PBSJ Minor Roads	Length (ft)	67,411	18	25	13,482	3,708	37,778	57,078	6
	gas oil wells	Count	2	19	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	23,053	18	25	7,607	2,092			3
	Natural Gas Pipeline	Length (ft)	9,170	18	0	1,742	0			0
	Residential - Institutional and Dormitory Housing	Count	5	18	100	28,835	30,661			24
	Residential - Manuf. Housing	Count	1	18	100	45	47			24
	Residential - Single Family Dwelling	Count	3	18	100	1,196	1,271			24
	transln_ca	Length (ft)	12,953	18	-	4,171	0			0
Walnut_Grove	Commercial - Professional/ Technical Services	Count	1	13	100	554	548			18
	Commercial - Retail Trade	Count	1	13	47	288	201			17
	Communication HAZUS SDURS	Count	3	17	100	354	389			18
	Delta Roads PBSJ Major Roads	Length (ft)	3,282	13	25	1,083	298			6
	Delta Roads PBSJ Minor Roads	Length (ft)	24,278	13	25	4,856	1,335			6
	Gas Oil Production Fields	Area (Acres)	284	13	0	0	0			0
	gas oil wells	Count	5	15	0	0	0			0
	hc ambulatory	Count	1	3	13	0	0			5
	Hwy Bridge HAZUS SDURS	Count	2	12	25	4,000	1,100			3

Waltham Tract	Residential - Duplex	Count	14	13	100	5,943	6,319	50,858	55,332	24
	Residential - Manuf. Housing	Count	7	13	100	416	431			24
	Residential - Single Family Dwelling	Count	142	13	100	37,839	40,235			24
	Commercial - Retail Trade	Count	1	9	30	78	47			11
	Delta Roads PBSJ Major Roads	Length (ft)	9,300	9	25	3,069	844			6
	Delta Roads PBSJ Minor Roads	Length (ft)	34,712	9	25	6,942	1,909			6
	Gas Oil Production Fields	Area (Acres)	690	9	0	0	0			0
	gas oil wells	Count	11	9	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	14	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	2,032	9	0	660	0			0
	Natural Gas Wells	Count	2	8	-	0	0			0
	Residential - Manuf. Housing	Count	38	9	100	1,992	2,060			24
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	9	46	44	24			22
	Residential - Single Family Dwelling	Count	135	9	44	35,624	18,816			21
	transln ca	Length (ft)	7,980	9	-	1,965	0			0
Water Body	Delta Roads PBSJ Minor Roads	Length (ft)	0	13	25	0	0	0	0	6
Water Canal	Gas Oil Production Fields	Area (Acres)	87	10	0	0	0	0	224	0
	gas oil wells	Count	4	8	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,178	10	0	224	0			0
Water Zone 1	Boatlaunch	Count	11	13	100	1,100	1,210	258,557	475,021	0
	bridges not in HAZUS	Count	9	25	25	4,500	1,238			3
	Commercial - Entertainment and Recreation	Count	9	11	33	17,934	11,146			12
	Commercial - Personal and Repair Services	Count	1	11	39	3,980	2,605			14
	Commercial - Professional/ Technical Services	Count	1	11	100	23,104	22,873			18
	Commercial - Retail Trade	Count	1	11	42	9,862	6,617			15
	Commercial - Wholesale Trade	Count	4	11	37	23,032	14,821			13
	Delta Roads PBSJ Major Roads	Length (ft)	71,910	11	25	23,730	6,526			6
	Delta Roads PBSJ Minor Roads	Length (ft)	212,007	11	25	42,401	11,660			6
	Fire Stations SDURS	Count	1	0	0	1,770	0			0
	Gas Oil Production Fields	Area (Acres)	2,779	11	0	0	0			0
	gas oil wells	Count	31	10	0	0	0			0
	Government - General Services	Count	1	11	35	3,265	2,313			13
	Hazmat HAZUS SDURS	Count	3	22	-	0	0			0
	hc ambulatory	Count	1	5	16	0	0			6
	Hwy Bridge HAZUS SDURS	Count	4	21	25	8,000	2,200			3
	Hwy HAZUS SDURS	Length (ft)	92,588	11	25	30,554	8,402			3
	Industrial - Heavy	Count	1	11	48	5,835	3,697			17
	Natural Gas Pipeline	Length (ft)	59,976	11	0	16,793	0			0
	Petroleum Pipelines	Length (ft)	5,368	11	0	1,127	0			0
	Police Stations HAZUS SDURS	Count	1	0	0	4,130	0			0
	Port HAZUS SDURS	Count	8	25	0	20,579	0			0
	rail 1000 nodes	Count	3	23	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	9,756	11	25	2,780	765			1
	Residential - Duplex	Count	1	11	100	2,313	2,459			24
	Residential - Institutional and Dormitory Housing	Count	1	11	30	11,261	5,235			14
	Residential - Manuf. Housing	Count	64	11	100	3,522	3,655			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	11	100	5,037	5,356			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	11	100	834	887			24
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	11	100	2,681	2,850			24
	Residential - Single Family Dwelling	Count	381	11	100	105,921	112,629			24
	Residential - Triplex-Quads	Count	2	11	100	2,723	2,895			24
	Schools HAZUS SDURS	Count	1	1	0	1,180	117			0
	sewage treat	Count	1	27	30	75,000	24,750			12
	substation ca	Count	6	9	25	6,000	1,650			0
	tankfarms	Count	1	31	-	3,000	0			0
	transln ca	Length (ft)	44,972	11	-	11,073	0			0
Water Zone 2	Boatlaunch	Count	13	8	100	1,300	1,430			0

	bridges not in HAZUS	Count	5	9	25	2,500	688				3
	Commercial - Entertainment and Recreation	Count	1	9	22	1,322	742				8
	Commercial - Medical Clinics	Count	1	9	20	2,538	1,563				7
	Commercial - Personal and Repair Services	Count	1	9	28	4,002	2,377				10
	Commercial - Professional/ Technical Services	Count	1	9	44	13,096	8,931				16
	Commercial - Retail Trade	Count	1	9	30	5,380	3,255				11
	Delta Roads PBSJ Major Roads	Length (ft)	635	9	25	210	58				6
	Delta Roads PBSJ Minor Roads	Length (ft)	85,438	9	25	17,088	4,699				6
	Gas Oil Production Fields	Area (Acres)	2,499	9	0	0	0				0
	gas oil wells	Count	40	7	0	0	0				0
	gas pipeline kinder morgan LS 9	Length (ft)	818	9	0	172	0				0
	Hwy Bridge HAZUS SDURS	Count	5	7	25	10,000	2,750				3
	Hwy HAZUS SDURS	Length (ft)	12,763	9	25	4,212	1,158				3
	mokelumne aqueduct pipe	Length (ft)	2,615	9	0	13,073	0				0
	Natural Gas Pipeline	Length (ft)	39,493	9	0	7,504	0				0
	Natural Gas Wells	Count	1	6	-	0	0				0
	Petroleum Pipelines	Length (ft)	95,126	9	0	19,976	0				0
	Port HAZUS SDURS	Count	16	9	0	41,158	0				0
	rail 1000 nodes	Count	6	9	-	0	0				0
	Rail Bridge HAZUS SDURS	Count	1	9	25	1,000	275				1
	Rail HAZUS SDURS	Length (ft)	34,230	9	25	9,756	2,683				1
	Religion - Churches and other Non-Profit	Count	1	9	14	2,858	1,540				5
	Residential - Duplex	Count	2	9	46	2,181	1,182				22
	Residential - Institutional and Dormitory Housing	Count	1	9	20	6,662	2,364				10
	Residential - Manuf. Housing	Count	33	9	100	1,904	1,968				24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	9	46	839	454				22
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	9	46	1,229	666				22
	Residential - Single Family Dwelling	Count	1,084	9	44	397,019	209,699				21
	Residential - Triplex-Quads	Count	1	9	46	1,031	558				22
	sewage treat	Count	4	9	30	830,000	273,900				12
	substation ca	Count	2	9	25	2,000	550				0
	transln ca	Length (ft)	34,667	9	-	8,535	0				0
	water_trans	Count	1	3	-	0	0	523,491	1,408,541		0
Water Zone 3	air trans	Count	1	9	-	0	0				0
	Boatlaunch	Count	6	8	100	600	660				0
	bridges not in HAZUS	Count	1	9	25	500	138				3
	Commercial - Professional/ Technical Services	Count	1	9	47	2,082	1,454				17
	Commercial - Retail Trade	Count	1	9	34	486	305				12
	Delta Roads PBSJ Major Roads	Length (ft)	5,123	9	25	1,690	465				6
	Delta Roads PBSJ Minor Roads	Length (ft)	59,268	9	25	11,854	3,260				6
	Gas Oil Production Fields	Area (Acres)	841	9	0	0	0				0
	gas oil wells	Count	5	10	0	0	0				0
	Hwy Bridge HAZUS SDURS	Count	5	8	25	10,000	2,750				3
	Hwy HAZUS SDURS	Length (ft)	3,508	9	25	1,157	318				3
	Natural Gas Pipeline	Length (ft)	7,114	9	0	1,636	0				0
	rail 1000 nodes	Count	1	4	-	0	0				0
	Rail HAZUS SDURS	Length (ft)	187	9	25	53	15				1
	Residential - Duplex	Count	1	9	48	1,121	643				23
	Residential - Manuf. Housing	Count	47	9	100	2,582	2,669				24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	9	48	113	65				23
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	9	48	23	13				23
	Residential - Single Family Dwelling	Count	119	9	47	33,459	18,875				22
	Residential - Triplex-Quads	Count	1	9	48	501	288				23
	sewage treat	Count	1	16	30	85,000	28,050				12
	transln ca	Length (ft)	5,951	9	-	1,465	0				0
Water Zone 4	water_trans	Count	1	9	-	0	0	59,967	154,321		0
	Airport Points	Count	1	5	25	0	0				0

	Boatlaunch	Count	3	5	100	300	330				0
	Commercial - Entertainment and Recreation	Count	1	8	22	1,768	992				8
	Commercial - Personal and Repair Services	Count	5	8	28	11,814	7,018				10
	Commercial - Professional/ Technical Services	Count	1	8	44	11,730	8,000				16
	Commercial - Retail Trade	Count	1	8	30	1,536	929				11
	Commercial - Wholesale Trade	Count	1	8	25	3,140	1,813				9
	Delta Roads PBSJ Minor Roads	Length (ft)	87,395	8	25	17,479	4,807				6
	Gas Oil Production Fields	Area (Acres)	135	8	0	0	0				0
	gas oil wells	Count	2	9	0	0	0				0
	gas pipeline kinder morgan LS 9	Length (ft)	2,097	8	0	440	0				0
	Hwy Bridge HAZUS SDURS	Count	3	9	25	6,000	1,650				3
	Hwy HAZUS SDURS	Length (ft)	7,757	8	25	2,560	704				3
	mokelumne aqueduct pipe	Length (ft)	8,377	8	0	41,887	0				0
	Natural Gas Pipeline	Length (ft)	21,265	8	0	4,040	0				0
	Rail HAZUS SDURS	Length (ft)	2,955	8	25	842	232				1
	Residential - Duplex	Count	5	8	46	2,322	1,258				22
	Residential - Manuf. Housing	Count	4	8	100	285	294				24
	Residential - Multi-Dwellings - 5 to 9 units	Count	1	8	46	3,204	1,736				22
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	8	46	1,584	858				22
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	8	46	726	393				22
	Residential - Single Family Dwelling	Count	198	8	44	56,813	30,007				21
	Residential - Triplex-Quads	Count	4	8	46	2,064	1,119				22
	sewage treat	Count	1	9	30	0	0				12
	transln ca	Length (ft)	8,997	8	-	2,897	0	62,140	173,431		0
Water Zone 5	bridges not in HAZUS	Count	1	6	25	500	138				3
	Commercial - Professional/ Technical Services	Count	1	11	50	654	468				18
	Commercial - Retail Trade	Count	1	11	38	1,782	1,157				14
	Delta Roads PBSJ Major Roads	Length (ft)	4,502	11	25	1,486	409				6
	Delta Roads PBSJ Minor Roads	Length (ft)	56,131	11	25	11,226	3,087				6
	Gas Oil Production Fields	Area (Acres)	153	11	0	0	0				0
	gas oil wells	Count	4	9	0	0	0				0
	Government - General Services	Count	1	11	31	2,280	1,575				11
	Hwy Bridge HAZUS SDURS	Count	8	10	25	16,000	4,400				3
	Hwy HAZUS SDURS	Length (ft)	2,401	11	25	792	218				3
	Natural Gas Pipeline	Length (ft)	9,989	11	0	3,246	0				0
	Natural Gas Wells	Count	1	5	-	0	0				0
	Petroleum Pipelines	Length (ft)	1,469	11	0	308	0				0
	Rail HAZUS SDURS	Length (ft)	4,811	11	25	1,371	377				1
	Residential - Institutional and Dormitory Housing	Count	1	11	26	5,663	2,408				12
	Residential - Manuf. Housing	Count	11	11	100	699	725				24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	11	50	480	287				24
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	11	50	740	442				24
	Residential - Single Family Dwelling	Count	229	11	49	64,341	38,042				23
	transln ca	Length (ft)	33,209	11	-	8,176	0	53,732	119,745		0
Webb_Tract	Gas Oil Production Fields	Area (Acres)	83	22	0	0	0				0
	gas oil wells	Count	18	20	0	0	0				0
	Natural Gas Pipeline	Length (ft)	1,291	22	0	245	0				0
	Natural Gas Wells	Count	1	16	-	0	0				0
	Residential - Single Family Dwelling	Count	1	22	100	171	182	182	416		24
West Sacramento North	Agriculture	Count	2	13	100	9,592	9,074				18
	air trans	Count	2	14	-	0	0				0
	Airport Points	Count	2	9	25	0	0				0
	Boatlaunch	Count	1	20	100	100	110				0
	bridges not in HAZUS	Count	9	10	25	4,500	1,238				3
	Commercial - Banks	Count	5	13	37	8,464	6,378				13
	Commercial - Entertainment and Recreation	Count	30	13	41	48,146	37,337				15
	Commercial - Medical Clinics	Count	9	13	34	26,113	21,141				12

Commercial - Personal and Repair Services	Count	49	13	47	115,090	93,050			17
Commercial - Professional and Technical Services	Count	5	13	100	160,910	177,001			18
Commercial - Retail Trade	Count	2	13	100	130,642	143,706			18
Commercial - Wholesale Trade	Count	75	13	45	344,890	275,050			16
Delta Roads PBSJ Major Roads	Length (ft)	98,688	13	25	32,567	8,956			6
Delta Roads PBSJ Minor Roads	Length (ft)	427,953	13	25	85,591	23,537			6
Government - Emergency Response	Count	1	13	44	5,740	4,041			16
Government - General Services	Count	3	13	44	7,948	5,945			16
Hazmat HAZUS SDURS	Count	15	5	-	0	0			0
hc ambulatory	Count	35	11	27	0	0			10
hc hospital	Count	2	21	100	0	0			18
hc nursing res	Count	3	13	38	0	0			18
Hwy Bridge HAZUS SDURS	Count	19	10	25	38,000	10,450			3
Hwy HAZUS SDURS	Length (ft)	44,710	13	25	14,754	4,057			3
Industrial - Construction	Count	10	13	100	39,344	36,354			18
Industrial - Food-Drug-Chemicals	Count	9	13	42	145,508	92,194			15
Industrial - Heavy	Count	9	13	100	61,195	54,390			18
Industrial - Light	Count	5	13	48	39,285	25,928			17
intermodal terminal facilities	Count	3	13	-	0	0			0
Natural Gas Pipeline	Length (ft)	38,321	13	0	9,963	0			0
Petroleum Pipelines	Length (ft)	33,586	13	0	7,053	0			0
pipeline trans	Count	1	0	-	0	0			0
Police Stations HAZUS SDURS	Count	1	4	12	4,130	1,254			4
Port HAZUS SDURS	Count	3	21	0	7,717	0			0
rail 1000 nodes	Count	15	9	-	0	0			0
Rail Bridge HAZUS SDURS	Count	4	7	25	4,000	1,100			1
Rail Facility HAZUS SDURS	Count	4	18	100	10,290	11,319			0
Rail HAZUS SDURS	Length (ft)	69,908	13	25	19,924	5,479			1
Religion - Churches and other Non-Profit	Count	5	13	30	28,462	17,846			11
Residential - Duplex	Count	202	13	100	76,617	81,469			24
Residential - Institutional and Dormitory Housing	Count	7	13	38	33,228	17,934			18
Residential - Manuf. Housing	Count	1,404	13	100	71,702	74,402			24
Residential - Multi-Dwellings - 10 to 19 units	Count	9	13	100	81,113	86,250			24
Residential - Multi-Dwellings - 20 to 49 units	Count	3	13	100	91,997	97,823			24
Residential - Multi-Dwellings - 5 to 9 units	Count	31	13	100	91,997	97,823			24
Residential - Multi-Dwellings - 50+ units	Count	1	13	100	88,788	94,411			24
Residential - Multi-Dwellings- 10 to 19 units	Count	9	13	100	52,085	55,383			24
Residential - Nursing Home	Count	1	13	38	6,755	3,646			18
Residential - Single Family Dwelling	Count	5,065	13	100	1,094,474	1,163,790			24
Residential - Triplex-Quads	Count	109	13	100	49,364	52,490			24
Schools HAZUS SDURS	Count	6	12	24	7,080	4,206			9
sewage treat	Count	1	33	30	100,000	33,000			12
solid waste facilities	Count	5	5	25	0	0			0
substation ca	Count	1	14	25	1,000	275			0
tankfarms	Count	2	0	-	6,000	0			0
transln ca	Length (ft)	39,059	13	-	9,617	0			0
utilities	Count	1	13	-	0	0			0
Waste Water HAZUS SDURS	Count	2	1	0	157,176	0			0
water trans	Count	4	14	-	0	0	2,929,836	3,428,905	0
air trans	Count	1	14	-	0	0			0
bridges not in HAZUS	Count	1	7	25	500	138			3
Commercial - Personal and Repair Services	Count	3	14	50	5,880	4,851			18
Commercial - Professional/ Technical Services	Count	1	14	100	7,536	8,290			18
Commercial - Retail Trade	Count	1	14	100	6,750	7,425			18
Commercial - Wholesale Trade	Count	2	14	49	10,098	8,275			18
Communication HAZUS SDURS	Count	2	15	100	236	260			18
Delta Roads PBSJ Major Roads	Length (ft)	52,500	14	25	17,325	4,764			6
Delta Roads PBSJ Minor Roads	Length (ft)	219,219	14	25	43,844	12,057			6

West Sacramento South 1

	Gas Oil Production Fields	Area (Acres)	144	14	0	0	0			0
	gas oil wells	Count	24	14	0	0	0			0
	hc ambulatory	Count	2	13	34	0	0			12
	hc nursing res	Count	1	17	100	0	0			24
	Hwy HAZUS SDURS	Length (ft)	24,905	14	25	8,219	2,260			3
	Petroleum Pipelines	Length (ft)	29,561	14	0	6,208	0			0
	Rail Bridge HAZUS SDURS	Count	1	7	25	1,000	275			1
	Rail HAZUS SDURS	Length (ft)	17,644	14	25	5,029	1,383			1
	Residential - Duplex	Count	6	14	100	4,637	4,930			24
	Residential - Manuf. Housing	Count	15	14	100	843	875			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	14	100	1,401	1,490			24
	Residential - Single Family Dwelling	Count	2,174	14	100	600,855	638,909			24
	Schools HAZUS SDURS	Count	2	16	45	2,360	1,674			16
	substation ca	Count	1	16	25	1,000	275			0
	transln ca	Length (ft)	7,712	14	-	1,899	0			0
	US cell towers	Count	2	13	-	500	0	698,131	726,118	0
West Sacramento South 2	Delta Roads PBSJ Major Roads	Length (ft)	3,073	6	25	1,014	279			6
	Petroleum Pipelines	Length (ft)	2,537	6	0	533	0	279	1,547	0
Woodward_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,139	19	25	5,628	1,548			6
	gas pipeline kinder morgan LS 9	Length (ft)	7,820	19	0	1,642	0			0
	mokelumne aqueduct pipe	Length (ft)	23,350	19	-	116,749	9,760			1
	Rail HAZUS SDURS	Length (ft)	2,290	0	0	653	0	11,308	124,671	0
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	9,701	14	25	1,940	534			6
	gas oil wells	Count	2	15	0	0	0			0
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	14	100	81	86			24
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	14	100	27	29			24
	Residential - Single Family Dwelling	Count	4	14	100	1,277	1,357			24
	transln ca	Length (ft)	53,221	14	-	13,104	0	2,006	16,429	0
Yolo_Bypass	Commercial - Personal and Repair Services	Count	2	11	35	4,476	2,831			13
	Commercial - Professional/ Technical Services	Count	1	11	50	9,234	6,602			18
	Commercial - Retail Trade	Count	1	11	38	3,770	2,447			14
	Commercial - Wholesale Trade	Count	4	11	32	20,302	12,506			12
	Delta Roads PBSJ Major Roads	Length (ft)	488	11	25	161	44			6
	Delta Roads PBSJ Minor Roads	Length (ft)	117,304	11	25	23,461	6,452			6
	Gas Oil Production Fields	Area (Acres)	6,636	11	0	0	0			0
	gas oil wells	Count	245	10	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	15	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	16,530	11	25	5,455	1,500			3
	Natural Gas Pipeline	Length (ft)	66,803	11	0	12,693	0			0
	Natural Gas Wells	Count	10	8	-	0	0			0
	Petroleum Pipelines	Length (ft)	58,521	11	0	12,289	0			0
	Rail HAZUS SDURS	Length (ft)	21,229	11	25	6,050	1,664			1
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	11	50	47	28			24
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	11	50	8	4			24
	Residential - Single Family Dwelling	Count	9	11	49	2,246	1,328			23
	transln ca	Length (ft)	124,041	11	-	30,540	0	36,506	134,731	0
Zone 120	Commercial - Retail Trade	Count	1	8	26	894	521			9
	Delta Roads PBSJ Major Roads	Length (ft)	30,536	8	25	10,077	2,771			6
	Delta Roads PBSJ Minor Roads	Length (ft)	44,789	8	25	8,958	2,463			6
	Gas Oil Production Fields	Area (Acres)	1,656	8	0	0	0			0
	gas oil wells	Count	37	9	0	0	0			0
	Natural Gas Pipeline	Length (ft)	18,811	8	0	6,113	0			0
	Natural Gas Wells	Count	14	11	-	0	0			0
	Residential - Manuf. Housing	Count	15	8	100	822	844			24
	Residential - Single Family Dwelling	Count	80	8	39	21,125	10,135			19
	transln ca	Length (ft)	16,407	8	-	4,040	0	16,735	52,028	0
	Residential - Single Family Dwelling	Count	1	11	100	188	199	199	188	24
Zone 122	Residential - Single Family Dwelling	Count	1	11	100	188	199	199	188	24

Zone 14	gas oil wells	Count	2	11	0	0	0			0
	Natural Gas Pipeline	Length (ft)	2,272	16	0	432	0	0	432	0
Zone 148	Commercial - Retail Trade	Count	1	13	100	106	117			18
	Delta Roads PBSJ Major Roads	Length (ft)	354	13	25	117	32			6
	Delta Roads PBSJ Minor Roads	Length (ft)	16,215	13	25	3,243	892			6
	gas oil wells	Count	6	16	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,686	13	25	3,196	879			3
	Residential - Manuf. Housing	Count	7	13	100	384	398			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	13	100	195	207			24
	Residential - Single Family Dwelling	Count	29	13	100	5,793	6,160			24
	Schools HAZUS SDURS	Count	1	12	24	1,180	701			9
	transln_ca	Length (ft)	7,364	13	-	1,813	0	9,386	16,027	0
Zone 155	Delta Roads PBSJ Minor Roads	Length (ft)	542	9	25	108	30			6
	transln_ca	Length (ft)	769	9	-	189	0	30	298	0
Zone 158 (Smith Tract_2)	Boatlaunch	Count	1	0	0	100	0			0
	Commercial - Personal and Repair Services	Count	2	2	12	5,474	1,626			4
	Commercial - Professional/ Technical Services	Count	1	2	16	5,304	1,692			6
	Commercial - Retail Trade	Count	1	2	14	8,644	2,662			5
	Commercial - Wholesale Trade	Count	1	2	8	7,660	2,107			3
	Delta Roads PBSJ Major Roads	Length (ft)	6,756	2	25	2,230	613			6
	Delta Roads PBSJ Minor Roads	Length (ft)	91,854	2	25	18,371	5,052			6
	Hazmat HAZUS SDURS	Count	8	2	-	0	0			0
	hc ambulatory	Count	2	1	11	0	0			4
	hc nursing res	Count	1	0	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	9	1	25	18,000	4,950			3
	Hwy HAZUS SDURS	Length (ft)	7,665	2	25	2,530	696			3
	Residential - Duplex	Count	44	2	23	18,882	4,805			11
	Residential - Manuf. Housing	Count	25	2	100	1,238	1,130			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	2	23	75	19			11
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	2	23	2,864	729			11
	Residential - Single Family Dwelling	Count	1,293	2	21	269,234	65,056			10
	Residential - Triplex-Quads	Count	53	2	23	23,969	6,099			11
	Schools HAZUS SDURS	Count	1	3	7	1,180	402			3
	utilities	Count	1	2	-	0	0	97,637	385,752	0
Zone 160	Delta Roads PBSJ Minor Roads	Length (ft)	9,297	6	25	1,859	511			6
	Residential - Single Family Dwelling	Count	71	6	33	13,904	5,498	6,009	15,763	16
Zone 162	Delta Roads PBSJ Minor Roads	Length (ft)	4,168	9	25	834	229			6
	Natural Gas Pipeline	Length (ft)	2,641	9	0	502	0			0
	Residential - Manuf. Housing	Count	1	9	100	63	65			24
	Residential - Single Family Dwelling	Count	10	9	44	3,207	1,694	1,988	4,606	21
Zone 171	Boatlaunch	Count	1	7	100	100	110			0
	Commercial - Retail Trade	Count	1	5	18	90	46			6
	Delta Roads PBSJ Major Roads	Length (ft)	11,829	5	25	3,904	1,074			6
	Delta Roads PBSJ Minor Roads	Length (ft)	3,990	5	25	798	219			6
	Gas Oil Production Fields	Area (Acres)	1,318	5	0	0	0			0
	gas oil wells	Count	19	4	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	6	7	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	5,715	5	25	1,886	519			3
	Natural Gas Pipeline	Length (ft)	20,613	5	0	6,699	0			0
	Rail HAZUS SDURS	Length (ft)	9,172	5	25	2,614	719			1
Zone 185	Residential - Single Family Dwelling	Count	5	5	29	1,187	415	6,402	29,277	14
	Commercial - Personal and Repair Services	Count	1	4	13	2,802	1,264			5
	Commercial - Professional/ Technical Services	Count	1	4	22	8,486	4,247			8
	Commercial - Retail Trade	Count	1	4	16	1,424	666			6
	Delta Roads PBSJ Minor Roads	Length (ft)	100,662	4	25	20,132	5,536			6
	gas oil wells	Count	1	0	0	0	0			0
	hc nursing res	Count	4	7	16	0	0			8

	Hwy Bridge HAZUS SDURS	Count	3	2	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	3,862	4	25	1,275	350			3
	Residential - Duplex	Count	43	4	26	16,425	4,938			12
	Residential - Institutional and Dormitory Housing	Count	5	4	14	34,389	7,439			7
	Residential - Manuf. Housing	Count	10	4	100	474	464			24
	Residential - Multi-Dwellings - 50+ units	Count	1	4	26	24,318	7,312			12
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	4	26	795	239			12
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	4	26	4,662	1,402			12
	Residential - Nursing Home	Count	2	4	14	8,610	1,863			7
	Residential - Single Family Dwelling	Count	2,231	4	26	639,921	193,576			12
	Residential - Triplex-Quads	Count	7	4	26	3,854	1,159			12
	Schools_HAZUS SDURS	Count	1	6	11	1,180	578	232,683	774,746	4
Zone 186	transin_ca	Length (ft)	13,335	9	-	3,283	0	0	3,283	0
Zone 197	Commercial - Professional/ Technical Services	Count	1	14	100	4	4			18
	Commercial - Retail Trade	Count	1	14	100	56	62			18
	Delta Roads PBSJ Major Roads	Length (ft)	4,871	14	25	1,607	442			6
	Delta Roads PBSJ Minor Roads	Length (ft)	31,146	14	25	6,229	1,713			6
	gas oil wells	Count	4	14	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	35,964	14	25	11,868	3,264			3
	Natural Gas Pipeline	Length (ft)	5,539	14	0	1,800	0			0
	rail 1000 nodes	Count	1	8	-	0	0			0
	Residential - Manuf. Housing	Count	16	14	100	801	831			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	14	100	402	427			24
	Residential - Single Family Dwelling	Count	57	14	100	11,969	12,727	19,470	34,736	24
Zone 206	bridges not in HAZUS	Count	3	2	25	3,000	825			3
	Commercial - Entertainment and Recreation	Count	2	4	14	4,100	1,939			5
	Commercial - Personal and Repair Services	Count	2	4	16	4,190	2,028			6
	Commercial - Professional/ Technical Services	Count	1	4	28	3,998	2,199			10
	Commercial - Retail Trade	Count	1	4	18	2,090	1,035			6
	Commercial - Wholesale Trade	Count	2	4	13	8,074	3,775			5
	Delta Roads PBSJ Major Roads	Length (ft)	14,002	4	25	4,621	1,271			6
	Delta Roads PBSJ Minor Roads	Length (ft)	7,511	4	25	1,502	413			6
	Elec Power HAZUS SDURS	Count	1	3	49	129,800	69,962			0
	Gas Oil Production Fields	Area (Acres)	113	4	0	0	0			0
	gas oil wells	Count	9	3	0	0	0			0
	Government - General Services	Count	1	4	12	1,755	533			4
	Hazmat HAZUS SDURS	Count	28	1	-	0	0			0
	mokelumne aqueduct pipe	Length (ft)	4,990	4	0	24,948	0			0
	Oil HAZUS SDURS	Count	1	3	20	118	26			0
	Petroleum Pipelines	Length (ft)	56,141	4	0	11,790	0			0
	rail 1000 nodes	Count	3	3	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	23,649	4	25	6,740	1,853			1
	Residential - Institutional and Dormitory Housing	Count	1	4	15	5,637	1,385			7
	transin_ca	Length (ft)	9,174	4	-	2,259	0	87,243	214,621	0
Zone 207	Delta Roads PBSJ Minor Roads	Length (ft)	5,101	4	25	1,020	281			6
	Petroleum Pipelines	Length (ft)	2,447	4	0	514	0			0
	Rail HAZUS SDURS	Length (ft)	20,443	4	25	5,826	1,602	1,883	7,360	1
Zone 214	Gas Oil Production Fields	Area (Acres)	174	10	0	0	0			0
	gas oil wells	Count	9	10	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,418	10	0	269	0			0
	Natural Gas Wells	Count	2	9	-	0	0	0	269	0
Zone 216	gas oil wells	Count	1	14	0	0	0			0
	Residential - Single Family Dwelling	Count	2	9	44	701	370	370	701	21
Zone 31	Residential - Single Family Dwelling	Count	2	5	33	645	255	255	645	16
Zone 33	Residential - Single Family Dwelling	Count	1	6	33	245	97	97	245	16
Zone 36	Commercial - Professional/ Technical Services	Count	1	3	16	38	15			6
	Commercial - Retail Trade	Count	1	3	14	84	31			5

	Delta Roads PBSJ Major Roads	Length (ft)	458	3	25	151	42			
	Delta Roads PBSJ Minor Roads	Length (ft)	3,556	3	25	711	196			
	Hwy HAZUS SDURS	Length (ft)	782	3	25	258	71			
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	3	23	26	6			
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	3	23	45	11			
	Residential - Single Family Dwelling	Count	21	3	21	7,130	1,723			
	solid waste facilities	Count	1	3	25	0	0			
	transln ca	Length (ft)	3,946	3	-	971	0	2,095	9,414	
Zone 37	Commercial - Entertainment and Recreation	Count	1	3	11	3,542	1,266			
	Commercial - Personal and Repair Services	Count	2	3	12	4,142	1,504			
	Commercial - Professional/ Technical Services	Count	1	3	16	10,296	3,964			
	Commercial - Retail Trade	Count	1	3	14	3,804	1,423			
	Commercial - Wholesale Trade	Count	1	3	8	4,438	1,513			
	Delta Roads PBSJ Major Roads	Length (ft)	4,472	3	25	1,476	406			
	Delta Roads PBSJ Minor Roads	Length (ft)	15,211	3	25	3,042	837			
	hc ambulatory	Count	1	4	14	0	0			
	Hwy HAZUS SDURS	Length (ft)	388	3	25	128	35			
	Industrial - Heavy	Count	3	3	12	18,748	7,300			
	Industrial - Light	Count	1	3	14	5,840	2,325			
	intermodal terminal facilities	Count	1	0	-	0	0			
	Petroleum Pipelines	Length (ft)	7,203	3	0	1,513	0			
	rail 1000 nodes	Count	1	0	-	0	0			
	Rail Facility HAZUS SDURS	Count	1	0	0	2,572	0			
	Rail HAZUS SDURS	Length (ft)	6,428	3	25	1,832	504			
	Residential - Duplex	Count	10	3	23	4,293	1,092			
	Residential - Manuf. Housing	Count	154	3	100	7,881	7,427			
	Residential - Multi-Dwellings - 10 to 19 units	Count	1	3	23	3,204	815			
	Residential - Multi-Dwellings - 20 to 49 units	Count	1	3	23	1,292,510	328,901			
	Residential - Multi-Dwellings - 5 to 9 units	Count	4	3	23	10,110	2,573			
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	3	23	2,048	521			
	Residential - Single Family Dwelling	Count	206	3	21	48,230	11,654			
	Residential - Triplex-Quads	Count	10	3	23	4,169	1,061			
	Waste Water HAZUS SDURS	Count	1	0	0	78,588	0			
	water trans	Count	2	0	-	0	0	375,120	1,512,403	
Zone 38	Colleges and Universities	Count	1	4	9	13,195	6,096			
	Commercial - Entertainment and Recreation	Count	1	4	12	2,734	1,218			
	Commercial - Personal and Repair Services	Count	3	4	13	6,408	2,890			
	Commercial - Professional/ Technical Services	Count	1	4	22	4,208	2,106			
	Commercial - Retail Trade	Count	1	4	16	4,086	1,910			
	Commercial - Wholesale Trade	Count	3	4	11	13,234	5,823			
	Delta Roads PBSJ Major Roads	Length (ft)	2,630	4	25	868	239			
	Delta Roads PBSJ Minor Roads	Length (ft)	15,931	4	25	3,186	876			
	Hazmat HAZUS SDURS	Count	2	0	-	0	0			
	Hwy Bridge HAZUS SDURS	Count	1	0	0	2,000	0			
	Hwy HAZUS SDURS	Length (ft)	1,607	4	25	530	146			
	Industrial - Food-Drug-Chemicals	Count	1	4	19	9,420	4,020			
	Industrial - Heavy	Count	1	4	15	3,905	1,598			
	Natural Gas Pipeline	Length (ft)	874	4	0	166	0			
	Petroleum Pipelines	Length (ft)	80,208	4	0	16,844	0			
	Port HAZUS SDURS	Count	1	2	0	2,572	0			
	rail 1000 nodes	Count	3	0	-	0	0			
	Rail Facility HAZUS SDURS	Count	1	0	0	2,572	0			
	Rail HAZUS SDURS	Length (ft)	26,920	4	25	7,672	2,110			

	transln_ca	Length (ft)	1,578	4	-	389	0	32,402	105,142	0
Zone 64	Commercial - Professional/ Technical Services	Count	1	3	16	504	194			6
	Commercial - Retail Trade	Count	1	3	14	444	166			5
	Delta Roads PBSJ Minor Roads	Length (ft)	240	3	25	48	13			6
	Gas Oil Production Fields	Area (Acres)	175	3	0	0	0			0
	gas oil wells	Count	1	0	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	3,245	3	25	1,071	294			3
	Industrial - Construction	Count	1	3	31	2,304	1,039			11
	Natural Gas Pipeline	Length (ft)	2,174	3	0	413	0			0
	Residential - Manuf. Housing	Count	2	3	100	143	134			24
	Residential - Single Family Dwelling	Count	20	3	21	5,372	1,298	3,139	10,298	10
Zone 65	Delta Roads PBSJ Minor Roads	Length (ft)	1,749	4	25	350	96	96	350	6
Zone 69	Delta Roads PBSJ Minor Roads	Length (ft)	4,234	6	25	847	233			6
	Gas Oil Production Fields	Area (Acres)	18	6	0	0	0			0
	gas oil wells	Count	2	6	0	0	0	233	847	0
Zone 74	Commercial - Retail Trade	Count	1	5	20	2	1			7
	Delta Roads PBSJ Major Roads	Length (ft)	17,859	5	25	5,893	1,621			6
	Delta Roads PBSJ Minor Roads	Length (ft)	37,247	5	25	7,449	2,049			6
	Gas Oil Production Fields	Area (Acres)	1,144	5	0	0	0			0
	gas oil wells	Count	52	6	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	7,891	5	25	2,604	716			3
	Natural Gas Pipeline	Length (ft)	29,191	5	0	5,546	0			0
	Natural Gas Wells	Count	1	7	-	0	0			0
	Petroleum Pipelines	Length (ft)	8,302	5	0	1,743	0			0
	Rail HAZUS SDURS	Length (ft)	8,166	5	25	2,327	640			1
	Residential - Duplex	Count	1	5	32	273	107			15
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	5	32	321	125			15
	Residential - Multi-Dwellings- 20 to 49 units	Count	1	5	32	54	21			15
	Residential - Single Family Dwelling	Count	38	5	33	11,798	4,665			16
	Residential - Triplex-Quads	Count	1	5	32	533	208			15
	transln_ca	Length (ft)	42,296	5	-	10,414	0	10,153	48,958	0
Zone 75	bridges not in HAZUS	Count	2	9	25	2,000	550			3
	Commercial - Retail Trade	Count	1	8	30	616	373			11
	Delta Roads PBSJ Major Roads	Length (ft)	424	8	25	140	39			6
	Delta Roads PBSJ Minor Roads	Length (ft)	29,348	8	25	5,870	1,614			6
	gas oil wells	Count	5	8	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	8,837	8	25	2,916	802			3
	Residential - Manuf. Housing	Count	3	8	100	141	145			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	8	46	75	41			22
	Residential - Single Family Dwelling	Count	48	8	44	13,914	7,349			21
	solid_waste_facilities	Count	1	9	25	0	0	10,912	25,672	0
Zone 77	Commercial - Professional/ Technical Services	Count	1	3	16	264	102			6
	Commercial - Retail Trade	Count	1	3	14	206	77			5
	Delta Roads PBSJ Major Roads	Length (ft)	8,434	3	25	2,783	765			6
	Delta Roads PBSJ Minor Roads	Length (ft)	2,010	3	25	402	111			6
	Rail HAZUS SDURS	Length (ft)	4,345	3	25	1,238	341			1
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	3	23	9	2			11
	Residential - Single Family Dwelling	Count	19	3	21	5,873	1,419			10
	transln_ca	Length (ft)	4,318	3	-	1,063	0	2,816	11,838	0
Zone 78	bridges not in HAZUS	Count	4	7	25	4,000	1,100			3
	Commercial - Professional/ Technical Services	Count	1	6	38	470	302			14
	Commercial - Retail Trade	Count	1	6	23	194	109			8
	Delta Roads PBSJ Major Roads	Length (ft)	10,243	6	25	3,380	930			6
	Delta Roads PBSJ Minor Roads	Length (ft)	19,483	6	25	3,897	1,072			6
	gas oil wells	Count	2	7	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,497	6	25	3,134	862			3
	Natural Gas Pipeline	Length (ft)	51	6	0	17	0			0

	Rail HAZUS SDURS	Length (ft)	6,016	6	25	1,715	471	9,959	29,185	1
	Residential - Manuf. Housing	Count	1	6	100	62	63			24
	Residential - Multi-Dwellings- 10 to 19 units	Count	1	6	39	36	16			18
	Residential - Single Family Dwelling	Count	39	6	37	11,273	5,034			18
	transln_ca	Length (ft)	4,101	6	-	1,010	0			0
Zone 79	Delta Roads PBSJ Minor Roads	Length (ft)	25,248	5	25	5,050	1,389	2,255	9,241	6
	gas oil wells	Count	7	5	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	4	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	7,315	5	0	1,390	0			0
	Residential - Single Family Dwelling	Count	3	5	33	801	317			16
Zone 80	Delta Roads PBSJ Major Roads	Length (ft)	2,593	4	25	856	235	2,466	10,969	6
	Delta Roads PBSJ Minor Roads	Length (ft)	27,373	4	25	5,475	1,506			6
	Gas Oil Production Fields	Area (Acres)	738	4	0	0	0			0
	gas oil wells	Count	9	4	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	5	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	6,720	4	0	1,277	0			0
	Natural Gas Wells	Count	1	3	-	0	0			0
	Petroleum Pipelines	Length (ft)	1,030	4	0	216	0			0
	Residential - Single Family Dwelling	Count	2	4	29	500	175			14
	transln_ca	Length (ft)	2,624	4	-	646	0			0
Zone 81	Delta Roads PBSJ Minor Roads	Length (ft)	16,624	7	25	3,325	914	2,404	9,839	6
	gas oil wells	Count	9	7	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	2	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	6,490	7	0	1,233	0			0
	Natural Gas Pipeline	Length (ft)	6,490	7	0	1,233	0			0
	Natural Gas Wells	Count	2	10	-	0	0			0
	Residential - Manuf. Housing	Count	1	7	100	44	45			24
	Residential - Single Family Dwelling	Count	8	7	37	2,004	895			18
Zone 82	Delta Roads PBSJ Major Roads	Length (ft)	3,108	5	25	1,026	282	603	7,124	6
	Delta Roads PBSJ Minor Roads	Length (ft)	703	5	25	141	39			6
	Hwy HAZUS SDURS	Length (ft)	3,110	5	25	1,026	282			3
	Natural Gas Pipeline	Length (ft)	10,954	5	0	2,081	0			0
	Natural Gas Pipeline	Length (ft)	10,954	5	0	2,081	0			0
	transln_ca	Length (ft)	2,387	5	-	769	0			0
Zone 90	Commercial - Professional/ Technical Services	Count	1	3	22	344	159	12,954	69,073	8
	Commercial - Retail Trade	Count	1	3	16	1,810	776			6
	Delta Roads PBSJ Major Roads	Length (ft)	9,390	3	25	3,099	852			6
	Delta Roads PBSJ Minor Roads	Length (ft)	14,262	3	25	2,852	784			6
	Hazmat HAZUS SDURS	Count	33	3	-	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	2	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	4,140	3	25	1,366	376			3
	Industrial - Food-Drug-Chemicals	Count	1	3	19	10,485	4,406			7
	Oil HAZUS SDURS	Count	1	2	20	118	26			0
	Petroleum Pipelines	Length (ft)	119,148	3	0	25,021	0			0
	Rail HAZUS SDURS	Length (ft)	9,484	3	25	2,703	743			1
	Residential - Single Family Dwelling	Count	38	3	26	10,518	3,182			12
	solid waste facilities	Count	3	1	0	0	0			0
	tankfarms	Count	1	0	-	3,000	0			0
	transln_ca	Length (ft)	7,135	3	-	1,757	0			0

Table 7- 2b: Estimate Summary of Asset Cost Damage by Island - 100-year Flood

Island Name	Total Repair Costs (\$1,000)	Total Asset Value (\$1,000)	Percent of Total Value Damaged (%)
Bacon_Island	31,586	43,916	72
Bethel_Island	240,145	254,118	95
Bishop_Tract	60,201	141,119	43
Bixler_Tract	455	1,161	39
Boggs_Tract	607,404	1,645,372	37
Bouldin_Island	14,359	25,897	55
Brack_Tract	3,088	14,021	22
Bradford_Island	11,554	21,630	53
Brannan-Andrus_Island	139,833	216,612	65
Browns_Island	0	0	0
Byron_Tract 1	38,550	124,406	31
Byron_Tract 2	5,729	20,838	27
Byron_Tract 3	15,684	43,815	36
Cache_Haas_Tract 1	15,252	65,884	23
Cache_Haas_Tract 2	1,997	3,425	58
Canal Ranch	10,564	20,757	51
Chippis_Island	0	0	0
Clifton Court Forebay Water	1,107	4,278	26
Coney_Island	23,296	21,921	106
Deadhorse_Island	281	998	28
Decker_Island	0	1,536	0
Discovery_Bay	603,770	1,146,004	53
Egbert_Tract	8,156	33,603	24
Elk_Grove 1	687,408	1,347,255	51
Empire_Tract	3,426	9,790	35
Fabian_Tract	16,775	39,116	43
Fay_Island	6	22	28
Glanville_Tract	16,305	52,804	31
Gliole_District	2,566	7,676	33
Grand_Island	198,075	253,978	78
Hastings_Tract 2	5,301	13,584	39
Holland_Land	1,216	3,637	33
Holland_Tract	6,982	15,787	44
Honker_Bay_Club	119	2,109	6
Hotchkiss_Tract 1	60,087	126,855	47
Hotchkiss_Tract 2	241	1,326	18
Jersey_Island	3,266	24,614	13
Jones_Tract-Upper_and_Lower	82,676	507,972	16
Kasson_District	1,857	6,153	30
King_Island	37,209	44,049	84
Libby_McNeil_Tract 1	9,011	19,259	47
Libby_McNeil_Tract 2	675	1,203	56
Liberte_Island	2,518	14,599	17
Lincoln_Village_Tract	563,017	1,262,742	45
Lisbon_District	31,502	78,015	40
Little_Holland_Tract	0	0	0
Little_Egbert□_Tract	13,043	21,346	61
Lower_Roberts_Island	393	1,149	34
Mandeville_Island	1,433	5,212	28
McCormack_Williamson_Tract	1,075	4,093	26
McDonald_Tract	21,141	36,246	58
McMullin_Ranch-River_Junction_Tract	14,490	42,818	34
Medford_Island	4,637	8,559	54

Merritt Island	27,914	40,825	68
Middle_Roberts_Island	89,924	565,645	16
Netherlands 1	1,652	3,940	42
Netherlands 2	127,144	196,851	65
New_Hope_Tract	36,508	88,106	41
Orwood_Tract	55,377	251,172	22
Palm_Tract	6,973	22,562	31
Paradise Junction	41,139	130,789	31
Pescadero	81,456	225,692	36
Peter Pocket	450	2,138	21
Pico_Naglee_Tract	206,610	388,892	53
Pierson_Tract	59,177	89,103	66
Pittsburg	18,510	65,772	28
Prospect_Island	1,050	1,788	59
Quimby_Island	271	626	43
RD 17 (Mossdale)	375,535	969,933	39
Rindge_Tract	6,017	18,516	32
Rio Blanco_Tract	1,212	9,988	12
Roberts_Island	0	100	0
Rough_and_Ready_Island	47,574	103,353	46
Ryer Island	30,185	61,494	49
Sacramento Pocket Area	15,214,659	28,781,540	53
Sargent_Barnhart_Tract 1	12,326	62,929	20
Sargent_Barnhart_Tract 2	869,224	1,973,371	44
Sargent_Barnhart_Tract 3	16,191	26,651	61
Schafter-Pintail Tract	1,027	3,080	33
Sherman_Island	22,533	114,940	20
Shima_Tract	518,341	997,638	52
Shin_Kee_Tract	1,212	12,324	10
Simmons-Wheeler_Island	113	252	45
SM-123	5,544	20,683	27
SM-124	167,145	469,547	36
SM-132	139	263	53
SM-133	0	0	0
SM-134	0	0	0
SM-198	1,125	4,521	25
SM-199	722	1,620	45
SM-202	127	266	48
SM-39	3,889	16,638	23
SM-40	428	1,556	28
SM-41	500	3,851	13
SM-42	275	1,753	16
SM-43	113	252	45
SM-44	1,452	5,701	25
SM-46	132	474	28
SM-47	0	0	0
SM-48	28,566	56,869	50
SM-49	25,588	53,690	48
SM-52	1,379	4,585	30
SM-53	30	70	43
SM-54	52,467	127,632	41
SM-55	1,110	5,213	21
SM-56	776	3,759	21
SM-57	3,666	15,680	23
SM-58	211	768	28
SM-59	513	1,789	29
SM-60	9,663	24,170	40
SM-84	5,090	15,093	34
SM-85-Grizzly_Island	3,293	16,932	19
Smith_Tract	490,073	1,401,180	35
Stark_Tract	282	5,199	5

Staten Island	4,655	20,596	23
Stewart Tract	17,160	53,787	32
Sutter Island	15,774	26,333	60
Terminus Tract 1	6,676	29,423	23
Terminus Tract 2	43,965	64,037	69
Terminus Tract 3	678	940	72
Twitchell Island	9,038	14,493	62
Tyler Island 2	27,458	92,866	30
Union Island 1	51,702	148,730	35
Union Island 2	23	574	4
Union Island 3	545	6,773	8
Union Island 4	135	686	20
Upper Roberts Island	13,433	63,146	21
Van Sickle Island	33,428	100,810	33
Veale Tract 1	7,575	21,936	35
Veale Tract 2	1,864	6,038	31
Venice Island	3,705	13,308	28
Victoria Island	37,778	57,078	66
Walnut Grove	50,858	55,332	92
Walthal Tract	24,249	52,374	46
Water Body	0	0	28
Water Canal	0	224	0
Water Zone 1	258,557	475,021	54
Water Zone 2	523,491	1,408,541	37
Water Zone 3	59,967	154,321	39
Water Zone 4	62,140	173,431	36
Water Zone 5	53,732	119,745	45
Webb Tract	182	416	44
West Sacramento North	2,929,836	3,428,905	85
West Sacramento South 1	698,131	726,118	96
West Sacramento South 2	279	1,547	18
Woodward Island	11,308	124,671	9
Wright-Elmwood Tract	2,006	16,429	12
Yolo Bypass	36,506	134,731	27
Zone 120	16,735	52,028	32
Zone 122	199	188	106
Zone 14	0	432	0
Zone 148	9,386	16,027	59
Zone 155	30	298	10
Zone 158 (Smith Tract 2)	97,637	385,752	25
Zone 160	6,009	15,763	38
Zone 162	1,988	4,606	43
Zone 171	6,402	29,277	22
Zone 185	232,683	774,746	30
Zone 186	0	3,283	0
Zone 197	19,470	34,736	56
Zone 206	87,243	214,621	41
Zone 207	1,883	7,360	26
Zone 214	0	269	0
Zone 216	370	701	53
Zone 31	255	645	40
Zone 33	97	245	40
Zone 36	2,095	9,414	22
Zone 37	375,120	1,512,403	25
Zone 38	32,402	105,142	31
Zone 64	3,139	10,298	30
Zone 65	96	350	28
Zone 69	233	847	28
Zone 74	10,153	48,958	21
Zone 75	10,912	25,672	43
Zone 77	2,816	11,838	24

Zone 78	9,959	29,185	34
Zone 79	2,255	9,241	24
Zone 80	2,466	10,969	22
Zone 81	2,404	9,839	24
Zone 82	603	7,124	8
Zone 90	12,954	69,073	19
TOTAL (\$1,000)	28,228,892	56,267,733	50

Table 7 - 3a: Estimate of Asset Cost Damaged by Island- (MHHW) - Scour- Current

1	2	3	4	5	6	7	8	9	10	11	12	13
Island Name	Asset Type	Structure Type	Inventory Unit	GIS Quantity (current)	Percent Damage	Total Asset Value	MHHW Inundation Repair Costs (\$1,000)	Differential Repair Costs (\$1,000)	MHHW Inundation Repair Costs By Island (\$1,000)	Differential Costs for Point Assets - By Island (\$1,000)	1,000ft Increment Costs for Point Assets - By Island (\$1,000)	Differential Costs for Linear Assets - By Island (\$1,000)
Bacon_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,752	25.0	6,350	1,588	4,763				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	12,115	0.0	3,695	0	3,695				
	Residential - Institutional Dormitory	Point	Count	3	100.0	9,948	9,948	0	11,536	0	0	8,458
Bethel_Island	Boatlaunch	Point	Count	3	0.0	300	0	300				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	94,725	25.0	18,945	4,736	14,209				
	gas oil wells	Point	Count	16	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	478	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	10,446	0.0	1,985	0	1,985				
	NG wells	Point	Length (ft)	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	220	100.0	7,520	7,520	-				
	Residential - Single Family Dwelling	Point	Count	510	48.6	93,141	45,290	47,851				
	utilities	Point	Count	1	0.0	0	-	-				
	water trans	Point	Count	2	0.0	0	-	-	57,546	48,151	1,057	16,193
Bishop_Tract	Boatlaunch	Point	Count	1	0.0	100	0	100				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	27,037	25.0	5,407	1,352	4,055				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	83	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	5	39.1	923	361	562				
Bixler_Tract	Transmission Line	Linear	Length (ft)	13,404	0.0	3,300	-	3,300	1,713	662	21	7,356
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	150	25.0	30	7	22				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	80	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	20.8	402	83	319	91	319	50	22
Bouldin_Island	Commercial - Professional and Technical	Point	Count	1	100.0	3,585	3,585	0				
	Commercial - Retail Trade	Point	Count	1	100.0	561	561	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,505	25.0	497	124	373				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,545	25.0	8,509	2,127	6,382				
	gas oil wells	Point	Count	14	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	18,408	25.0	6,075	1,519	4,556				
	utilities	Point	Count	1	0.0	0	-	-	7,916	0	0	11,310
Brack_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,330	25.0	1,266	316	949				
	gas oil wells	Point	Count	8	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,223	0.0	741	0	741				
	Residential - Manuf. Housing	Point	Count	4	100.0	127	127	-				
	Residential - Single Family Dwelling	Point	Count	2	100.0	200	200	0	643	0	0	1,691
Bradford_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	39,651	25.0	7,930	1,983	5,948				
	gas oil wells	Point	Count	11	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	642	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,733	0.0	1,082	0	1,082				
	NG wells	Point	Count	5	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	6	100.0	197	197	-				
	Residential - Single Family Dwelling	Point	Count	18	100.0	3,200	3,200	0	5,380	0	0	7,030
Brannan-Andrus Island	air trans	Point	Count	1	0.0	0	-	-				
	Boatlaunch	Point	Count	8	100.0	800	800	0				
	Commercial - Entertainment and Recreation	Point	Count	1	100.0	1,364	1,364	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	22,069	25.0	7,283	1,821	5,462				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	187,578	25.0	37,516	9,379	28,137				
	gas oil wells	Point	Count	88	0.0	0	-	-				

	gas oil-production fields	Point	Area (acres)	3,872	0.0	0	-	-				
	hc hospital	Point	Count	1	100.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,000	0	4,000				
	hwy HAZUS SDURS	Linear	Length (ft)	34,137	25.0	11,265	2,816	8,449				
	NG Pipelines	Linear	Length (ft)	35,601	0.0	8,366	0	8,366				
	NG wells	Point	Count	48	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	234	100.0	8,128	8,128	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	365	365	0				
	Residential - Single Family Dwelling	Point	Count	250	100.0	36,053	36,053	0				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-				
	Transmission Line	Linear	Length (ft)	2,649	0.0	652	-	652				
	water_trans	Point	Count	2	0.0	0	-	-	60,726	4,000	128	51,066
Browns_Island	Hazmat HAZUS SDURS	Point	Count	2	0.0	0	-	-	0	0	0	0
Byron_Tract 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,380	25.0	1,276	319	957				
	hwy HAZUS SDURS	Linear	Length (ft)	5,458	25.0	1,801	450	1,351				
	Residential - Manuf. Housing	Point	Count	1	11.0	37	4	33				
	Residential - Single Family Dwelling	Point	Count	4	48.6	738	359	379				
	Transmission Line	Linear	Length (ft)	10,358	0.0	3,335	-	3,335	1,132	412	33	5,643
Byron_Tract 2	Bridges not in HAZUS	Point	Count	4	0.0	4,000	0	4,000				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,532	25.0	2,506	627	1,880				
	Residential - Manuf. Housing	Point	Count	2	100.0	63	63	-				
	Residential - Single Family Dwelling	Point	Count	16	32.6	3,298	1,076	2,222				
	Transmission Line	Linear	Length (ft)	25,246	0.0	8,128	-	8,128	1,766	6,222	49	10,008
Cache_Haas_Tract 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	58,538	25.0	11,708	2,927	8,781				
	gas oil wells	Point	Count	13	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	669	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	877	0.0	167	0	167				
	NG wells	Point	Count	1	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	10,876	0.0	3,502	-	3,502	2,927	0	0	12,449
Cache_Haas_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,532	25.0	1,706	427	1,280				
	gas oil wells	Point	Count	15	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	474	0.0	0	-	-				
	NG wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	17	17	-				
	Residential - Single Family Dwelling	Point	Count	4	25.8	776	200	576				
	Transmission Line	Linear	Length (ft)	567	0.0	183	-	183	643	576	100	1,462
Canal Ranch	Commercial - Professional and Techni	Point	Count	1	22.0	726	160	566				
	Commercial - Retail Trade	Point	Count	1	16.0	477	76	401				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,555	25.0	911	228	683				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	170	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	NG Pipelines	Linear	Length (ft)	1,065	0.0	202	0	202	464	2,967	207	886
Chipps_Island	gas oil wells	Point	Count	2	0.0	0	-	-	0	0	0	0
Clifton Court Forebay Water	Boatlaunch	Point	Count	1	0.0	100	0	100				
	Residential - Single Family Dwelling	Point	Count	2	12.5	336	42	294				
	Transmission Line	Linear	Length (ft)	9,729	0.0	3,132	-	3,132	42	394	25	3,132
Coney_Island	Residential - Manuf. Housing	Point	Count	9	11.0	305	34	271				
	Residential - Single Family Dwelling	Point	Count	60	48.6	12,859	6,253	6,606	6,286	6,878	1,675	0
Deadhorse Island	gas oil wells	Point	Count	3	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	199	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,862	0.0	734	0	734				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	45.5	6	3	3				
	Residential - Single Family Dwelling	Point	Count	1	48.6	170	83	87	85	91	3	734
Decker_Island	NG Pipelines	Linear	Length (ft)	8,044	0.0	1,528	0	1,528	0	0	0	1,528
Egbert_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,243	25.0	2,049	512	1,536				
	gas oil wells	Point	Count	24	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	688	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,937	0.0	945	0	945				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	3	32.6	564	184	380				
	Transmission Line	Linear	Length (ft)	2,861	0.0	921	-	921	696	380	8	3,402

Empire_Tract	Boatlaunch	Point	Count	1	100.0	100	100	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	36,993	25.0	7,399	1,850	5,549				
	gas oil wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	3	100.0	127	127	-				
	Residential - Single Family Dwelling	Point	Count	2	100.0	200	200	0	2,277	0	0	5,549
Fabian_Tract	Boatlaunch	Point	Count	1	0.0	100	0	100				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	34,239	25.0	6,848	1,712	5,136				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,817	0.0	345	0	345				
	Residential - Manuf. Housing	Point	Count	5	100.0	186	186	-				
	Residential - Single Family Dwelling	Point	Count	8	25.8	1,189	306	883				
	Transmission Line	Linear	Length (ft)	9,642	0.0	2,374	-	2,374	2,204	983	30	7,855
Fay Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	112	25.0	22	6	17	6	0	0	17
Glanville_Tract	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,036	25.0	672	168	504				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,455	25.0	491	123	368				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	85	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	13	13	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	25.5	6	2	4				
	Residential - Single Family Dwelling	Point	Count	1	25.8	197	51	146	356	151	34	872
Grand Island	Boatlaunch	Point	Count	1	0.0	100	0	100				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,301	25.0	1,089	272	817				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	127,834	25.0	25,567	6,392	19,175				
	gas oil wells	Point	Count	34	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	760	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,000	0	4,000				
	hwy HAZUS SDURS	Linear	Length (ft)	65,548	25.0	21,631	5,408	16,223				
	Industrial - Light	Point	Count	2	48.0	4,440	2,131	2,309				
	NG Pipelines	Linear	Length (ft)	11,501	0.0	2,185	0	2,185				
	NG wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	22	100.0	768	768	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	1,472	1,472	0				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	100.0	391	391	0				
	Residential - Single Family Dwelling	Point	Count	217	100.0	38,543	38,543	0				
	Transmission Line	Linear	Length (ft)	13,185	0.0	3,246	-	3,246				
	US Cell Towers	Point	Count	1	0.0	250	-	250	55,377	6,659	459	41,647
Hastings_Tract 1	Commercial - Retail Trade	Point	Count	1	100.0	3	3	0				
	gas oil-production fields	Point	Area (acres)	45	0.0	0	-	-	3	0	0	0
Hastings_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,299	25.0	2,060	515	1,545				
	gas oil wells	Point	Count	27	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	359	0.0	0	-	-				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	6	25.8	1,021	263	758				
	Transmission Line	Linear	Length (ft)	4,432	0.0	1,427	-	1,427	778	758	19	2,972
Holland_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	41,410	25.0	8,282	2,070	6,211				
	gas oil wells	Point	Count	8	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	Residential - Manuf. Housing	Point	Count	2	100.0	64	64	-				
	Residential - Single Family Dwelling	Point	Count	5	100.0	1,054	1,054	0	3,188	2,000	42	6,211
Honker_Bay_Club	gas oil-production fields	Point	Area (acres)	46	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,395	0.0	835	0	835				
	Petroleum Pipelines	Linear	Length (ft)	4,793	0.0	4,793	0	4,793				
	Residential - Single Family Dwelling	Point	Count	1	20.8	176	37	139	37	139	12	5,628
Hotchkiss_Tract 1	Boatlaunch	Point	Count	1	100.0	100	100	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	34,037	25.0	6,807	1,702	5,106				
	gas oil wells	Point	Count	14	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	46	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	NG Pipelines	Linear	Length (ft)	12,157	0.0	2,310	0	2,310				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	69	100.0	2,448	2,448	-				
	Residential - Single Family Dwelling	Point	Count	220	37.0	39,991	14,797	25,194				

	Transmission Line	Linear	Length (ft)	14,067	0.0	4,529	-	4,529	19,047	27,194	530	11,945
Hotchkiss_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,345	25.0	669	167	502				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	615	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,370	0.0	450	0	450	167	0	0	952
Jersey_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,773	25.0	6,155	1,539	4,616				
	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	536	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,421	0.0	3,388	0	3,388				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	35	35	-				
	Residential - Single Family Dwelling	Point	Count	3	100.0	579	579	0				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-				
	Transmission Line	Linear	Length (ft)	15,918	0.0	5,125	-	5,125	2,153	0	0	13,129
Jones_Tract-Upper_and_Lower	Bridges not in HAZUS	Point	Count	1	0.0	1,000	0	1,000				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	81,999	25.0	16,400	4,100	12,300				
	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	106	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,018	0.0	1,054	0	11,054				
	mokelumne aqueduct pipe	Linear	Length (ft)	14,985	0.0	74,924	5,694	0				
	NG Pipelines	Linear	Length (ft)	15,032	0.0	24,202	0	24,202				
	NG wells	Point	Count	1	0.0	0	-	-				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	39	0	39				
	Rail HAZUS SDURS	Linear	Length (ft)	5,678	100.0	1,618	8,000	0				
	Residential - Manuf. Housing	Point	Count	3	100.0	76	76	-				
	Residential - Single Family Dwelling	Point	Count	4	100.0	483	483	0	18,353	1,000	20	37,595
King_Island	Boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial - Entertainment and Recre	Point	Count	1	45.0	463	208	255				
	Commercial - Retail Trade	Point	Count	1	100.0	3,543	3,543	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	33,844	25.0	6,769	1,692	5,077				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	151	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,000	0	4,000				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	42	100.0	1,404	1,404	-				
	Residential - Single Family Dwelling	Point	Count	17	100.0	2,209	2,209	0				
	water trans	Point	Count	1	0.0	0	-	-	9,157	4,255	84	5,077
	Communication HAZUS SDURS	Point	Count	1	0.0	118	0	118				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,110	25.0	1,686	422	1,265				
Libby_McNeil_Tract 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,178	25.0	2,036	509	1,527				
	gas oil wells	Point	Count	7	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	143	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	81	81	-				
	Residential - Single Family Dwelling	Point	Count	41	25.8	7,402	1,906	5,496	2,917	5,614	153	2,791
Libby_McNeil_Tract 2	Boatlaunch	Point	Count	1	0.0	100	0	100				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	345	25.0	69	17	52				
	gas oil-production fields	Point	Area (acres)	42	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	4	12.5	689	86	603	103	703	14	52
Liberte Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,521	25.0	2,304	576	1,728				
	gas oil wells	Point	Count	17	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	470	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
Lincoln_Village_Tract	NG Pipelines	Linear	Length (ft)	21,289	0.0	4,045	0	4,045	576	2,000	147	5,773
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	10	10	0				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	100.0	8	8	0				
	Residential - Single Family Dwelling	Point	Count	1	12.5	151	19	132	37	132	5	0
Lisbon_District	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,276	25.0	455	114	341				
	Rail HAZUS SDURS	Linear	Length (ft)	2,360	25.0	673	168	504				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	25.5	5	1	4				
	Residential - Single Family Dwelling	Point	Count	1	25.8	148	38	110	321	114	3	846
Little Holland Tract	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	88	0.0	0	-	-	0	0	0	0

Little_Egbert_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,466	25.0	1,693	423	1,270				
	gas oil wells	Point	Count	18	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	412	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,709	0.0	1,370	0	1,370				
	Residential - Single Family Dwelling	Point	Count	3	48.6	568	276	292	700	292	6	2,640
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,657	25.0	931	233	698				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	11.0	20	2	18				
	Residential - Single Family Dwelling	Point	Count	1	37.0	126	47	79	282	97	2	698
Mandeville_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	26,062	25.0	5,212	1,303	3,909				
	gas oil wells	Point	Count	4	0.0	0	-	-	1,303	0	0	3,909
McCormack_Williamson_Tract	Communication HAZUS SDURS	Point	Count	2	0.0	236	0	236				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,930	25.0	1,986	496	1,489				
	gas oil wells	Point	Count	16	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	802	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,699	0.0	893	0	893	496	236	46	2,382
McDonald_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,770	25.0	10,554	2,639	7,916				
	gas oil wells	Point	Count	48	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	602	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,235	0.0	1,597	0	1,597				
	Residential - Institutional Dormitory	Point	Count	1	47.0	4,756	2,235	2,521	4,874	2,521	39	9,512
Medford_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,314	25.0	5,663	1,416	4,247				
	Residential - Institutional Dormitory	Point	Count	1	100.0	1,756	1,756	0	3,172	0	0	4,247
Merritt_Island	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	2,454	25.0	810	202	607				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,095	25.0	6,019	1,505	4,514				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	44	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	63	63	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	25.5	43	11	32				
	Residential - Single Family Dwelling	Point	Count	27	25.8	4,740	1,221	3,519	3,002	3,551	87	5,122
Middle_Roberts_Island	Boatlaunch	Point	Count	3	100.0	300	300	0				
	Commercial - Personal and Repair Serv	Point	Count	1	32.0	615	197	418				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	11,881	25.0	3,921	980	2,940				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	107,709	25.0	21,542	5,385	16,156				
	gas oil wells	Point	Count	22	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	619	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	8,230	0.0	1,728	0	11,728				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	18,586	25.0	6,133	1,533	4,600				
	mokelumne aqueduct pipe	Linear	Length (ft)	22,309	0.0	111,543	0	111,543				
	NG Pipelines	Linear	Length (ft)	13,010	0.0	2,472	0	2,472				
	NG wells	Point	Count	5	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	3,641	0.0	3,641	0	3,641				
	Rail HAZUS SDURS	Linear	Length (ft)	7,982	25.0	2,275	569	1,706				
	Residential - Manuf. Housing	Point	Count	18	44.0	615	271	344				
	Residential - Single Family Dwelling	Point	Count	51	39.1	7,599	2,973	4,626				
	Solid Waste Facilities	Point	Count	1	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	40,597	0.0	9,995	-	9,995	12,208	7,388	443	154,782
	air trans	Point	Count	1	0.0	0	-	-				
Netherlands_2	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	2,040	25.0	673	168	505				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	116,483	25.0	23,297	5,824	17,472				
	gas oil wells	Point	Count	19	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	24	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	6,756	0.0	2,229	0	2,229				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,050	25.0	584	146	438				
	Residential - Manuf. Housing	Point	Count	1	100.0	80	80	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	25.5	72	18	54				
	Residential - Single Family Dwelling	Point	Count	36	25.8	6,418	1,653	4,765	7,890	6,819	262	20,645
New_Hope_Tract	Boatlaunch	Point	Count	2	100.0	200	200	0				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	2,043	25.0	674	169	506				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,489	25.0	2,298	574	1,723								
	gas oil wells	Point	Count	20	0.0	0	-	-								
	gas oil-production fields	Point	Area (acres)	647	0.0	0	-	-								
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000								
	hwy HAZUS SDURS	Linear	Length (ft)	1,022	0.0	337	0	337								
	NG Pipelines	Linear	Length (ft)	11,534	0.0	2,191	0	2,191								
	NG wells	Point	Count	2	0.0	0	-	-								
	Residential - Manuf. Housing	Point	Count	28	100.0	985	985	-								
Residential - Single Family Dwelling	Point	Count	12	29.3	1,684	493	1,191	2,421	3,191	49	4,758					
Orwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,924	25.0	2,585	646	1,939								
	gas oil wells	Point	Count	3	0.0	0	-	-								
	gas pipeline kinder_morgan LS 9	Linear	Length (ft)	14,840	0.0	3,116	0	13,116								
	mokelumne aqueduct pipe	Linear	Length (ft)	40,546	0.0	202,729	15,407	0								
	NG Pipelines	Linear	Length (ft)	6,469	0.0	1,811	0	1,811								
	Residential - Manuf. Housing	Point	Count	1	100.0	22	22	-								
	Residential - Single Family Dwelling	Point	Count	81	46.6	20,688	9,646	11,042								
	Transmission Line	Linear	Length (ft)	8,083	0.0	2,602	-	2,602								
Palm_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,442	25.0	4,888	1,222	3,666	25,721	11,042	170	9,469				
	gas oil wells	Point	Count	1	0.0	0	-	-								
	gas oil-production fields	Point	Area (acres)	100	0.0	0	-	-								
	NG Pipelines	Linear	Length (ft)	10,249	0.0	2,870	0	2,870								
	Rail HAZUS SDURS	Linear	Length (ft)	12,627	25.0	3,599	900	2,699								
	Residential - Manuf. Housing	Point	Count	1	100.0	47	47	-								
	Residential - Single Family Dwelling	Point	Count	9	100.0	1,976	1,976	0								
	Transmission Line	Linear	Length (ft)	5,169	0.0	1,664	-	1,664								
Peter Pocket	gas oil wells	Point	Count	3	0.0	0	-	-	4,145	0	0	10,899				
	gas oil-production fields	Point	Area (acres)	406	0.0	0	-	-								
	NG wells	Point	Count	2	0.0	0	-	-								
	Residential - Single Family Dwelling	Point	Count	1	16.4	209	34	175								
	Transmission Line	Linear	Length (ft)	864	0.0	278	-	278								
Pico_Naglee_Tract	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,806	25.0	3,236	809	2,427	34	175	1	278				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,771	25.0	1,554	389	1,166								
	gas oil wells	Point	Count	2	0.0	0	-	-								
	NG Pipelines	Linear	Length (ft)	8,918	0.0	1,694	0	1,694								
	Residential - Manuf. Housing	Point	Count	1	44.0	60	26	34								
	Residential - Single Family Dwelling	Point	Count	19	20.8	4,302	893	3,409								
	Transmission Line	Linear	Length (ft)	1,083	0.0	267	-	267								
	utilities	Point	Count	1	0.0	0	-	-								
Pierson_Tract	Communication HAZUS SDURS	Point	Count	3	100.0	354	354	0	2,117	3,443	441	5,554				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,242	25.0	2,720	680	2,040								
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	48,597	25.0	9,719	2,430	7,290								
	Fire Stations HAZUS SDURS	Point	Count	1	0.0	708	0	708								
	gas oil wells	Point	Count	8	0.0	0	-	-								
	gas oil-production fields	Point	Area (acres)	109	0.0	0	-	-								
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,000	0	4,000								
	hwy HAZUS SDURS	Linear	Length (ft)	5,832	0.0	1,924	0	1,924								
	Residential - Manuf. Housing	Point	Count	5	100.0	202	202	-								
	Residential - Single Family Dwelling	Point	Count	54	39.1	7,642	2,990	4,652								
	Schools HAZUS SDURS	Point	Count	2	0.0	1,180	0	1,180								
	Transmission Line	Linear	Length (ft)	2,764	0.0	680	-	680								
	Pittsburg	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	552	25.0	110	28					83	6,656	10,540	92
NG Pipelines		Linear	Length (ft)	3,070	0.0	583	0	583								
Petroleum Pipelines		Linear	Length (ft)	3,751	0.0	3,751	0	3,751								
Port HAZUS SDURS		Linear	Length (ft)	1	0.0	2,572	0	2,572								
rail 1000 nodes		Linear	Length (ft)	2	0.0	0	-	-								
Rail HAZUS SDURS		Linear	Length (ft)	10,235	25.0	2,917	729	2,188								
Residential - Manuf. Housing		Point	Count	1	100.0	28	28	-								
Residential - Multi Dwellings - 10 to 19		Point	Count	1	22.5	457	103	354								
Residential - Multi Dwellings - 50+ units		Point	Count	1	22.5	237	53	184								
Residential - Single Family Dwelling		Point	Count	28	20.8	5,610	1,164	4,446								
substation ca		Point	Count	1	25.0	1,000	250	750								
Transmission Line		Linear	Length (ft)	24,176	0.0	5,953	-	5,953								
									2,355	5,734	158	15,130				

Prospect_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,398	25.0	1,080	270	810				
	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	300	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	15.5	1	0	1				
	Residential - Single Family Dwelling	Point	Count	2	20.8	447	93	354	363	355	9	810
Quimby_Island	Bridges not in HAZUS	Point	Count	1	0.0	1,000	0	1,000				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	100.0	84	84	0	84	1,000	79	0
Rindge_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	85,006	25.0	17,001	4,250	12,751				
	gas oil wells	Point	Count	9	0.0	0	-	-				
	NG wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	83	83	-				
	Residential - Single Family Dwelling	Point	Count	4	100.0	534	534	0				
	US Cell Towers	Point	Count	1	0.0	250	-	250	4,867	250	4	12,751
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,927	25.0	585	146	439				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	495	25.0	163	41	123				
	Transmission Line	Linear	Length (ft)	6,826	0.0	1,681	-	1,681	187	2,000	149	2,242
Roberts_Island	Boat launch	Point	Count	1	0.0	100	0	100	0	100	739	0
Rough_and_Ready_Island	air trans	Point	Count	1	0.0	0	-	-				
	Commercial - Entertainment and Recre	Point	Count	1	16.0	504	81	423				
	Commercial - Personal and Repair Ser	Point	Count	1	19.0	938	178	760				
	Commercial - Wholesale Trade	Point	Count	2	16.0	4,608	737	3,871				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,690	25.0	1,548	387	1,161				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	45,755	25.0	9,151	2,288	6,863				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	10	14.0	11,669	1,634	10,035				
	Hazmat HAZUS SDURS	Point	Count	3	0.0	0	-	-				
	Industrial - Heavy	Point	Count	1	22.0	1,253	276	977				
	Petroleum Pipelines	Linear	Length (ft)	7,384	0.0	7,384	0	7,384				
	rail 1000 nodes	Linear	Length (ft)	5	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	20,357	25.0	5,802	1,450	4,351				
	Residential - Manuf. Housing	Point	Count	7	100.0	231	231	-				
	Residential - Single Family Dwelling	Point	Count	11	32.6	1,477	482	995	7,744	17,062	14,808	19,759
Ryer Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,851	25.0	611	153	458				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	44,230	25.0	8,846	2,212	6,635				
	gas oil wells	Point	Count	10	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	46	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	44,661	0.0	14,738	0	14,738				
	Residential - Manuf. Housing	Point	Count	2	100.0	96	96	-				
	Residential - Single Family Dwelling	Point	Count	23	100.0	4,384	4,384	0	6,844	2,000	27	21,831
Sargent_Barnhart_Tract 2	air trans	Point	Count	1	0.0	0	-	-				
	Commercial - Medical Office Clinic	Point	Count	1	17.0	774	132	642				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	92,847	25.0	18,569	4,642	13,927				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,566	0.0	1,169	0	11,169				
	hc ambulatory	Point	Count	1	2.0	0	-	-				
	mokelumne aqueduct pipe	Linear	Length (ft)	16,471	0.0	82,357	0	82,357				
	Petroleum Pipelines	Linear	Length (ft)	6	0.0	6	0	6				
	Residential - Manuf. Housing	Point	Count	6	100.0	399	399	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	43.0	638	274	364				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	43.0	9,177	3,946	5,231				
	Residential - Single Family Dwelling	Point	Count	1,044	100.0	235,436	235,436	0				
	Schools HAZUS SDURS	Point	Count	1	11.0	590	65	525				
	substation ca	Point	Count	1	25.0	1,000	250	750				
	Transmission Line	Linear	Length (ft)	7,749	0.0	1,908	-	1,908	245,144	7,512	205	99,366
Sargent_Barnhart_Tract 3	Commercial - Entertainment and Recre	Point	Count	4	1.0	3,230	32	3,198				
	Commercial - Personal and Repair Ser	Point	Count	1	0.0	493	0	493				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,225	0.0	245	0	245				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	13.5	50	7	43				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	13.5	181	24	157				

	Residential - Single Family Dwelling	Point	Count	23	12.5	4,686	586	4,100	649	7,991	82	245
Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,297	25.0	2,459	615	1,844				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	37.0	309	114	195	729	195	22	1,844
Sherman_Island	Boatlaunch	Point	Count	3	0.0	300	0	300				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,521	25.0	502	125	376				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	69,133	25.0	13,827	3,457	10,370				
	gas oil wells	Point	Count	31	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	530	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	19,828	25.0	6,543	1,636	4,907				
	NG Pipelines	Linear	Length (ft)	65,495	0.0	21,613	0	21,613				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	26	100.0	887	887	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	42	42	0				
	Residential - Single Family Dwelling	Point	Count	21	100.0	3,037	3,037	0				
	Transmission Line	Linear	Length (ft)	21,392	0.0	6,887	-	6,887	9,184	300	16	44,155
Shima_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	964	25.0	193	48	145				
	Transmission Line	Linear	Length (ft)	17,639	0.0	4,343	-	4,343	48	0	0	4,487
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,484	25.0	297	74	223				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	2,073	0.0	510	-	510	74	0	0	733
Simmons-Wheeler Island	Residential - Single Family Dwelling	Point	Count	1	20.8	140	29	111	29	111	7	0
SM-123	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,122	25.0	1,224	306	918				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	Petroleum Pipelines	Linear	Length (ft)	6	0.0	6	0	6				
	Residential - Single Family Dwelling	Point	Count	1	12.5	119	15	104				
	Transmission Line	Linear	Length (ft)	312	0.0	77	-	77	321	2,104	95	1,002
SM-124	Delta Roads PBSJ Major Roads	Linear	Length (ft)	724	25.0	239	60	179				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,144	25.0	1,829	457	1,372				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	1	7.0	711	50	661				
	NG Pipelines	Linear	Length (ft)	1,966	0.0	373	0	373				
	Petroleum Pipelines	Linear	Length (ft)	2,637	0.0	2,637	0	2,637				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,057	0.0	586	0	586				
	Residential - Manuf. Housing	Point	Count	2	11.0	51	6	45				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	13.5	238	32	206				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	13.5	327	44	283				
	Residential - Single Family Dwelling	Point	Count	135	12.5	23,831	2,979	20,852				
	Sewage Treatment	Point	Count	2	0.0	175,000	-	26,250				
	Transmission Line	Linear	Length (ft)	3,814	0.0	939	-	939	3,627	48,297	1,334	6,087
SM-132	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	37.0	176	65	111	65	111	220	0
SM-133	gas oil wells	Point	Count	9	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	203	0.0	0	-	-	0	0	0	0
SM-134	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1	0.0	0	-	-	0	0	0	0
SM-198	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	662	25.0	132	33	99				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,303	0.0	818	0	818				
	Petroleum Pipelines	Linear	Length (ft)	5,048	0.0	5,048	0	5,048				
	Rail HAZUS SDURS	Linear	Length (ft)	422	25.0	120	30	90				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	38.5	15	6	9				
	Residential - Single Family Dwelling	Point	Count	4	37.0	630	233	397	302	406	267	6,055
SM-199	Communication HAZUS SDURS	Point	Count	1	49.0	118	58	60				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,663	25.0	533	133	400				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	32.0	10	3	7				
	Residential - Single Family Dwelling	Point	Count	2	32.6	440	144	296	338	363	9	400
SM-202	Residential - Single Family Dwelling	Point	Count	1	20.8	165	34	131	34	131	12	0
SM-39	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,276	25.0	1,455	364	1,091				
	Transmission Line	Linear	Length (ft)	2,256	0.0	555	-	555	364	0	0	1,647

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,489	25.0	2,298	574	1,723								
	gas oil wells	Point	Count	20	0.0	0	-	-								
	gas oil-production fields	Point	Area (acres)	647	0.0	0	-	-								
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000								
	hwy HAZUS SDURS	Linear	Length (ft)	1,022	0.0	337	0	337								
	NG Pipelines	Linear	Length (ft)	11,534	0.0	2,191	0	2,191								
	NG wells	Point	Count	2	0.0	0	-	-								
	Residential - Manuf. Housing	Point	Count	28	100.0	985	985	-								
Residential - Single Family Dwelling	Point	Count	12	29.3	1,684	493	1,191	2,421	3,191	49	4,758					
Orwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,924	25.0	2,585	646	1,939								
	gas oil wells	Point	Count	3	0.0	0	-	-								
	gas pipeline kinder_morgan LS 9	Linear	Length (ft)	14,840	0.0	3,116	0	13,116								
	mokelumne aqueduct pipe	Linear	Length (ft)	40,546	0.0	202,729	15,407	0								
	NG Pipelines	Linear	Length (ft)	6,469	0.0	1,811	0	1,811								
	Residential - Manuf. Housing	Point	Count	1	100.0	22	22	-								
	Residential - Single Family Dwelling	Point	Count	81	46.6	20,688	9,646	11,042								
	Transmission Line	Linear	Length (ft)	8,083	0.0	2,602	-	2,602								
Palm_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,442	25.0	4,888	1,222	3,666	25,721	11,042	170	9,469				
	gas oil wells	Point	Count	1	0.0	0	-	-								
	gas oil-production fields	Point	Area (acres)	100	0.0	0	-	-								
	NG Pipelines	Linear	Length (ft)	10,249	0.0	2,870	0	2,870								
	Rail HAZUS SDURS	Linear	Length (ft)	12,627	25.0	3,599	900	2,699								
	Residential - Manuf. Housing	Point	Count	1	100.0	47	47	-								
	Residential - Single Family Dwelling	Point	Count	9	100.0	1,976	1,976	0								
	Transmission Line	Linear	Length (ft)	5,169	0.0	1,664	-	1,664								
Peter Pocket	gas oil wells	Point	Count	3	0.0	0	-	-	4,145	0	0	10,899				
	gas oil-production fields	Point	Area (acres)	406	0.0	0	-	-								
	NG wells	Point	Count	2	0.0	0	-	-								
	Residential - Single Family Dwelling	Point	Count	1	16.4	209	34	175								
	Transmission Line	Linear	Length (ft)	864	0.0	278	-	278								
Pico_Naglee_Tract	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,806	25.0	3,236	809	2,427	34	175	1	278				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,771	25.0	1,554	389	1,166								
	gas oil wells	Point	Count	2	0.0	0	-	-								
	NG Pipelines	Linear	Length (ft)	8,918	0.0	1,694	0	1,694								
	Residential - Manuf. Housing	Point	Count	1	44.0	60	26	34								
	Residential - Single Family Dwelling	Point	Count	19	20.8	4,302	893	3,409								
	Transmission Line	Linear	Length (ft)	1,083	0.0	267	-	267								
	utilities	Point	Count	1	0.0	0	-	-								
Pierson_Tract	Communication HAZUS SDURS	Point	Count	3	100.0	354	354	0	2,117	3,443	441	5,554				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,242	25.0	2,720	680	2,040								
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	48,597	25.0	9,719	2,430	7,290								
	Fire Stations HAZUS SDURS	Point	Count	1	0.0	708	0	708								
	gas oil wells	Point	Count	8	0.0	0	-	-								
	gas oil-production fields	Point	Area (acres)	109	0.0	0	-	-								
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,000	0	4,000								
	hwy HAZUS SDURS	Linear	Length (ft)	5,832	0.0	1,924	0	1,924								
	Residential - Manuf. Housing	Point	Count	5	100.0	202	202	-								
	Residential - Single Family Dwelling	Point	Count	54	39.1	7,642	2,990	4,652								
	Schools HAZUS SDURS	Point	Count	2	0.0	1,180	0	1,180								
	Transmission Line	Linear	Length (ft)	2,764	0.0	680	-	680								
	Pittsburg	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	552	25.0	110	28					83	6,656	10,540	92
NG Pipelines		Linear	Length (ft)	3,070	0.0	583	0	583								
Petroleum Pipelines		Linear	Length (ft)	3,751	0.0	3,751	0	3,751								
Port HAZUS SDURS		Linear	Length (ft)	1	0.0	2,572	0	2,572								
rail 1000 nodes		Linear	Length (ft)	2	0.0	0	-	-								
Rail HAZUS SDURS		Linear	Length (ft)	10,235	25.0	2,917	729	2,188								
Residential - Manuf. Housing		Point	Count	1	100.0	28	28	-								
Residential - Multi Dwellings - 10 to 19		Point	Count	1	22.5	457	103	354								
Residential - Multi Dwellings - 50+ units		Point	Count	1	22.5	237	53	184								
Residential - Single Family Dwelling		Point	Count	28	20.8	5,610	1,164	4,446								
substation ca		Point	Count	1	25.0	1,000	250	750								
Transmission Line		Linear	Length (ft)	24,176	0.0	5,953	-	5,953								
									2,355	5,734	158	15,130				

Prospect_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,398	25.0	1,080	270	810				
	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	300	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	15.5	1	0	1				
	Residential - Single Family Dwelling	Point	Count	2	20.8	447	93	354	363	355	9	810
Quimby_Island	Bridges not in HAZUS	Point	Count	1	0.0	1,000	0	1,000				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	100.0	84	84	0	84	1,000	79	0
Rindge_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	85,006	25.0	17,001	4,250	12,751				
	gas oil wells	Point	Count	9	0.0	0	-	-				
	NG wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	83	83	-				
	Residential - Single Family Dwelling	Point	Count	4	100.0	534	534	0				
	US Cell Towers	Point	Count	1	0.0	250	-	250	4,867	250	4	12,751
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,927	25.0	585	146	439				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	495	25.0	163	41	123				
	Transmission Line	Linear	Length (ft)	6,826	0.0	1,681	-	1,681	187	2,000	149	2,242
Roberts_Island	Boat launch	Point	Count	1	0.0	100	0	100	0	100	739	0
Rough_and_Ready_Island	air trans	Point	Count	1	0.0	0	-	-				
	Commercial - Entertainment and Recre	Point	Count	1	16.0	504	81	423				
	Commercial - Personal and Repair Ser	Point	Count	1	19.0	938	178	760				
	Commercial - Wholesale Trade	Point	Count	2	16.0	4,608	737	3,871				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,690	25.0	1,548	387	1,161				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	45,755	25.0	9,151	2,288	6,863				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	10	14.0	11,669	1,634	10,035				
	Hazmat HAZUS SDURS	Point	Count	3	0.0	0	-	-				
	Industrial - Heavy	Point	Count	1	22.0	1,253	276	977				
	Petroleum Pipelines	Linear	Length (ft)	7,384	0.0	7,384	0	7,384				
	rail 1000 nodes	Linear	Length (ft)	5	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	20,357	25.0	5,802	1,450	4,351				
	Residential - Manuf. Housing	Point	Count	7	100.0	231	231	-				
	Residential - Single Family Dwelling	Point	Count	11	32.6	1,477	482	995	7,744	17,062	14,808	19,759
Ryer Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,851	25.0	611	153	458				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	44,230	25.0	8,846	2,212	6,635				
	gas oil wells	Point	Count	10	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	46	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	44,661	0.0	14,738	0	14,738				
	Residential - Manuf. Housing	Point	Count	2	100.0	96	96	-				
	Residential - Single Family Dwelling	Point	Count	23	100.0	4,384	4,384	0	6,844	2,000	27	21,831
Sargent_Barnhart_Tract 2	air trans	Point	Count	1	0.0	0	-	-				
	Commercial - Medical Office Clinic	Point	Count	1	17.0	774	132	642				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	92,847	25.0	18,569	4,642	13,927				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,566	0.0	1,169	0	11,169				
	hc ambulatory	Point	Count	1	2.0	0	-	-				
	mokelumne aqueduct pipe	Linear	Length (ft)	16,471	0.0	82,357	0	82,357				
	Petroleum Pipelines	Linear	Length (ft)	6	0.0	6	0	6				
	Residential - Manuf. Housing	Point	Count	6	100.0	399	399	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	43.0	638	274	364				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	43.0	9,177	3,946	5,231				
	Residential - Single Family Dwelling	Point	Count	1,044	100.0	235,436	235,436	0				
	Schools HAZUS SDURS	Point	Count	1	11.0	590	65	525				
	substation ca	Point	Count	1	25.0	1,000	250	750				
	Transmission Line	Linear	Length (ft)	7,749	0.0	1,908	-	1,908	245,144	7,512	205	99,366
Sargent_Barnhart_Tract 3	Commercial - Entertainment and Recre	Point	Count	4	1.0	3,230	32	3,198				
	Commercial - Personal and Repair Ser	Point	Count	1	0.0	493	0	493				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,225	0.0	245	0	245				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	13.5	50	7	43				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	13.5	181	24	157				

	Residential - Single Family Dwelling	Point	Count	23	12.5	4,686	586	4,100	649	7,991	82	245
Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,297	25.0	2,459	615	1,844				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	37.0	309	114	195	729	195	22	1,844
Sherman_Island	Boatlaunch	Point	Count	3	0.0	300	0	300				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,521	25.0	502	125	376				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	69,133	25.0	13,827	3,457	10,370				
	gas oil wells	Point	Count	31	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	530	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	19,828	25.0	6,543	1,636	4,907				
	NG Pipelines	Linear	Length (ft)	65,495	0.0	21,613	0	21,613				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	26	100.0	887	887	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	42	42	0				
	Residential - Single Family Dwelling	Point	Count	21	100.0	3,037	3,037	0				
	Transmission Line	Linear	Length (ft)	21,392	0.0	6,887	-	6,887	9,184	300	16	44,155
Shima_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	964	25.0	193	48	145				
	Transmission Line	Linear	Length (ft)	17,639	0.0	4,343	-	4,343	48	0	0	4,487
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,484	25.0	297	74	223				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	2,073	0.0	510	-	510	74	0	0	733
Simmons-Wheeler Island	Residential - Single Family Dwelling	Point	Count	1	20.8	140	29	111	29	111	7	0
SM-123	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,122	25.0	1,224	306	918				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	Petroleum Pipelines	Linear	Length (ft)	6	0.0	6	0	6				
	Residential - Single Family Dwelling	Point	Count	1	12.5	119	15	104				
	Transmission Line	Linear	Length (ft)	312	0.0	77	-	77	321	2,104	95	1,002
SM-124	Delta Roads PBSJ Major Roads	Linear	Length (ft)	724	25.0	239	60	179				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,144	25.0	1,829	457	1,372				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	1	7.0	711	50	661				
	NG Pipelines	Linear	Length (ft)	1,966	0.0	373	0	373				
	Petroleum Pipelines	Linear	Length (ft)	2,637	0.0	2,637	0	2,637				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,057	0.0	586	0	586				
	Residential - Manuf. Housing	Point	Count	2	11.0	51	6	45				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	13.5	238	32	206				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	13.5	327	44	283				
	Residential - Single Family Dwelling	Point	Count	135	12.5	23,831	2,979	20,852				
	Sewage Treatment	Point	Count	2	0.0	175,000	-	26,250				
	Transmission Line	Linear	Length (ft)	3,814	0.0	939	-	939	3,627	48,297	1,334	6,087
SM-132	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	37.0	176	65	111	65	111	220	0
SM-133	gas oil wells	Point	Count	9	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	203	0.0	0	-	-	0	0	0	0
SM-134	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1	0.0	0	-	-	0	0	0	0
SM-198	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	662	25.0	132	33	99				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,303	0.0	818	0	818				
	Petroleum Pipelines	Linear	Length (ft)	5,048	0.0	5,048	0	5,048				
	Rail HAZUS SDURS	Linear	Length (ft)	422	25.0	120	30	90				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	38.5	15	6	9				
	Residential - Single Family Dwelling	Point	Count	4	37.0	630	233	397	302	406	267	6,055
SM-199	Communication HAZUS SDURS	Point	Count	1	49.0	118	58	60				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,663	25.0	533	133	400				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	32.0	10	3	7				
	Residential - Single Family Dwelling	Point	Count	2	32.6	440	144	296	338	363	9	400
SM-202	Residential - Single Family Dwelling	Point	Count	1	20.8	165	34	131	34	131	12	0
SM-39	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,276	25.0	1,455	364	1,091				
	Transmission Line	Linear	Length (ft)	2,256	0.0	555	-	555	364	0	0	1,647

SM-40	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,779	25.0	1,556	389	1,167	389	0	0	1,167
SM-41	Commercial - Professional and Technic	Point	Count	1	16.0	2	0	2				
	Commercial - Retail Trade	Point	Count	1	14.0	33	5	28				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	217	25.0	43	11	33				
	Petroleum Pipelines	Linear	Length (ft)	9,239	0.0	9,239	0	9,239				
SM-42	Rail HAZUS SDURS	Linear	Length (ft)	5,520	0.0	1,573	0	1,573	16	30	2	10,845
	substation ca	Point	Count	1	25.0	1,000	250	750				
	Transmission Line	Linear	Length (ft)	3,060	0.0	753	-	753	250	750	162	753
SM-43	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	80	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	29.3	167	49	118	49	118	14	0
SM-44	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,456	25.0	1,691	423	1,268				
	Residential - Single Family Dwelling	Point	Count	3	16.4	666	109	557				
	Transmission Line	Linear	Length (ft)	2,710	0.0	667	-	667	532	557	6,563	1,936
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,339	25.0	468	117	351	117	0	0	351
SM-47	Solid Waste Facilities	Point	Count	1	0.0	0	-	-	0	0	0	0
SM-48	Commercial - Entertainment and Recre	Point	Count	1	9.0	719	65	654				
	Commercial - Professional and Technic	Point	Count	1	11.0	838	92	746				
	Commercial - Retail Trade	Point	Count	2	9.0	14,909	1,342	13,567				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	20,675	0.0	20,675	0	20,675				
	Rail HAZUS SDURS	Linear	Length (ft)	9,922	25.0	2,828	707	2,121	2,206	14,967	1,717	22,796
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,642	25.0	528	132	396				
SM-49	Petroleum Pipelines	Linear	Length (ft)	2,421	0.0	2,421	0	2,421				
	Rail HAZUS SDURS	Linear	Length (ft)	4,395	25.0	1,253	313	940				
	Residential - Single Family Dwelling	Point	Count	2	16.4	484	79	405	525	405	4,769	3,757
	gas oil-production fields	Point	Area (acres)	2	0.0	0	-	-	0	0	0	0
SM-52	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,849	25.0	370	92	277				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	169	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	28.5	2	1	1				
	Residential - Single Family Dwelling	Point	Count	1	25.8	300	77	223	170	224	53	277
SM-53	Commercial - Retail Trade	Point	Count	1	16.0	14	2	12				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	53	0.0	11	0	11				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	96	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	15.5	1	0	1	2	13	1	11
SM-54	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,720	25.0	344	86	258				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	1,917	25.0	546	137	410	223	0	0	668
SM-55	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,381	25.0	2,876	719	2,157				
	NG Pipelines	Linear	Length (ft)	4,432	0.0	842	0	842				
	Petroleum Pipelines	Linear	Length (ft)	4,260	0.0	4,260	0	4,260				
	Residential - Single Family Dwelling	Point	Count	2	29.3	351	103	248	822	248	685	7,259
SM-56	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,417	25.0	1,083	271	812				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,637	0.0	881	0	881				
	Petroleum Pipelines	Linear	Length (ft)	3,100	0.0	3,100	0	3,100				
	Residential - Single Family Dwelling	Point	Count	3	20.8	577	120	457	391	457	128	4,794
SM-57	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,560	25.0	912	228	684				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	NG Pipelines	Linear	Length (ft)	535	0.0	102	0	102				
	Transmission Line	Linear	Length (ft)	5,521	0.0	1,359	-	1,359	228	2,000	845	2,145
SM-58	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,840	25.0	768	192	576	192	0	0	576
SM-59	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	200	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	631	25.0	208	52	156	52	0	0	156
SM-60	Commercial - Entertainment and Recre	Point	Count	1	9.0	664	60	604				
	Commercial - Professional and Technic	Point	Count	1	11.0	938	103	835				
	Commercial - Retail Trade	Point	Count	1	9.0	335	30	305				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	805	25.0	161	40	121				

SM-40	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,779	25.0	1,556	389	1,167	389	0	0	1,167
SM-41	Commercial - Professional and Technic	Point	Count	1	16.0	2	0	2				
	Commercial - Retail Trade	Point	Count	1	14.0	33	5	28				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	217	25.0	43	11	33				
	Petroleum Pipelines	Linear	Length (ft)	9,239	0.0	9,239	0	9,239				
SM-42	Rail HAZUS SDURS	Linear	Length (ft)	5,520	0.0	1,573	0	1,573	16	30	2	10,845
	substation ca	Point	Count	1	25.0	1,000	250	750				
	Transmission Line	Linear	Length (ft)	3,060	0.0	753	-	753	250	750	162	753
SM-43	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	80	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	29.3	167	49	118	49	118	14	0
SM-44	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,456	25.0	1,691	423	1,268				
	Residential - Single Family Dwelling	Point	Count	3	16.4	666	109	557				
	Transmission Line	Linear	Length (ft)	2,710	0.0	667	-	667	532	557	6,563	1,936
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,339	25.0	468	117	351	117	0	0	351
SM-47	Solid Waste Facilities	Point	Count	1	0.0	0	-	-	0	0	0	0
SM-48	Commercial - Entertainment and Recre	Point	Count	1	9.0	719	65	654				
	Commercial - Professional and Technic	Point	Count	1	11.0	838	92	746				
	Commercial - Retail Trade	Point	Count	2	9.0	14,909	1,342	13,567				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	20,675	0.0	20,675	0	20,675				
	Rail HAZUS SDURS	Linear	Length (ft)	9,922	25.0	2,828	707	2,121	2,206	14,967	1,717	22,796
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,642	25.0	528	132	396				
SM-49	Petroleum Pipelines	Linear	Length (ft)	2,421	0.0	2,421	0	2,421				
	Rail HAZUS SDURS	Linear	Length (ft)	4,395	25.0	1,253	313	940				
	Residential - Single Family Dwelling	Point	Count	2	16.4	484	79	405	525	405	4,769	3,757
	gas oil-production fields	Point	Area (acres)	2	0.0	0	-	-	0	0	0	0
SM-52	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,849	25.0	370	92	277				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	169	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	28.5	2	1	1				
	Residential - Single Family Dwelling	Point	Count	1	25.8	300	77	223	170	224	53	277
SM-53	Commercial - Retail Trade	Point	Count	1	16.0	14	2	12				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	53	0.0	11	0	11				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	96	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	15.5	1	0	1	2	13	1	11
SM-54	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,720	25.0	344	86	258				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	1,917	25.0	546	137	410	223	0	0	668
SM-55	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,381	25.0	2,876	719	2,157				
	NG Pipelines	Linear	Length (ft)	4,432	0.0	842	0	842				
	Petroleum Pipelines	Linear	Length (ft)	4,260	0.0	4,260	0	4,260				
	Residential - Single Family Dwelling	Point	Count	2	29.3	351	103	248	822	248	685	7,259
SM-56	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,417	25.0	1,083	271	812				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,637	0.0	881	0	881				
	Petroleum Pipelines	Linear	Length (ft)	3,100	0.0	3,100	0	3,100				
	Residential - Single Family Dwelling	Point	Count	3	20.8	577	120	457	391	457	128	4,794
SM-57	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,560	25.0	912	228	684				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	NG Pipelines	Linear	Length (ft)	535	0.0	102	0	102				
	Transmission Line	Linear	Length (ft)	5,521	0.0	1,359	-	1,359	228	2,000	845	2,145
SM-58	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,840	25.0	768	192	576	192	0	0	576
SM-59	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	200	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	631	25.0	208	52	156	52	0	0	156
SM-60	Commercial - Entertainment and Recre	Point	Count	1	9.0	664	60	604				
	Commercial - Professional and Technic	Point	Count	1	11.0	938	103	835				
	Commercial - Retail Trade	Point	Count	1	9.0	335	30	305				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	805	25.0	161	40	121				

	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000	233	3,744	456	121
SM-84	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	40,711	25.0	8,142	2,036	6,107				
	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	9	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	7	29.3	1,372	401	971	2,437	971	65	6,107
SM-85-Grizzly_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,407	25.0	8,481	2,120	6,361				
	gas oil wells	Point	Count	11	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	188	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	28,157	0.0	5,350	0	5,350				
	Petroleum Pipelines	Linear	Length (ft)	2,326	0.0	2,326	0	2,326				
	Residential - Single Family Dwelling	Point	Count	4	29.3	908	266	642	2,386	642	8,253	14,037
Smith_Tract	Residential - Single Family Dwelling	Point	Count	1	12.5	153	19	134	19	134	13	0
Staten_Island	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	4,422	25.0	1,459	365	1,094				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	16,055	25.0	3,211	803	2,408				
	gas oil wells	Point	Count	20	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1,092	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	14,653	0.0	3,810	0	3,810				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	4	100.0	122	122	-				
	Residential - Single Family Dwelling	Point	Count	2	100.0	192	192	0	1,482	0	0	7,313
Sutter_Island	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	3,515	25.0	1,160	290	870				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	61,390	25.0	12,278	3,069	9,208				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	5,145	25.0	1,698	424	1,273				
	Residential - Manuf. Housing	Point	Count	2	100.0	35	35	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	38.5	299	115	184				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	38.5	79	30	49				
	Residential - Single Family Dwelling	Point	Count	33	37.0	6,014	2,225	3,789	6,190	4,021	727	11,352
Terminus_Tract 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,329	25.0	266	66	199				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	27	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	763	25.0	252	63	189				
	Residential - Manuf. Housing	Point	Count	2	44.0	92	40	52				
	Residential - Single Family Dwelling	Point	Count	1	16.4	144	24	120				
	Schools HAZUS SDURS	Point	Count	1	0.0	590	0	590	193	762	54	388
Terminus_Tract 2	Agriculture	Point	Count	1	100.0	953	953	0				
	Boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial - Wholesale Trade	Point	Count	1	49.0	1,610	789	821				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	2,780	25.0	917	229	688				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	57,147	25.0	11,429	2,857	8,572				
	gas oil wells	Point	Count	9	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	303	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	hwy HAZUS SDURS	Linear	Length (ft)	4,771	25.0	1,574	394	1,181				
	NG wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	121	100.0	4,126	4,126	-				
	Residential - Single Family Dwelling	Point	Count	48	100.0	6,493	6,493	0				
	US Cell Towers	Point	Count	1	0.0	250	-	250	15,941	3,071	1,030	10,441
Terminus_Tract 3	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	251	25.0	50	13	38				
	Residential - Manuf. Housing	Point	Count	7	100.0	230	230	-				
	Residential - Single Family Dwelling	Point	Count	3	16.4	361	59	302	302	302	6,053	38
Twitchell_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	19,768	25.0	3,954	988	2,965				
	gas oil wells	Point	Count	22	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1,407	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	6,373	0.0	1,466	0	1,466				
	NG wells	Point	Count	9	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	19	100.0	663	663	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	32	32	0				
	Residential - Single Family Dwelling	Point	Count	17	100.0	2,273	2,273	0	3,956	0	0	4,431
Tyler_Island 2	airport points	Point	Count	1	0.0	0	-	-				
	Airports HAZUS SDURS	Point	Count	1	25.0	6,431	1,608	4,823				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	5,160	25.0	1,703	426	1,277				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	132,666	25.0	26,533	6,633	19,900				
	gas oil wells	Point	Count	45	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	2,107	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	NG Pipelines	Linear	Length (ft)	14,527	0.0	3,051	0	3,051				
	NG wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	106	106	-				
	Residential - Single Family Dwelling	Point	Count	13	100.0	2,319	2,319	0				
	Runway HAZUS SDURS	Point	Count	1	0.0	36,674	0	36,674				
	Solid Waste Facilities	Point	Count	1	0.0	0	-	-	11,092	43,498	1,395	24,227
Union_Island 1	Dams HAZUS SDURS	Point	Count	1	0.0	0	-	-				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,382	25.0	1,446	361	1,084				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	82,479	25.0	16,496	4,124	12,372				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	148	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	14,719	0.0	2,797	0	2,797				
	Residential - Manuf. Housing	Point	Count	4	100.0	131	131	-				
Union_Island 4	Residential - Single Family Dwelling	Point	Count	15	37.0	2,320	858	1,462				
	Transmission Line	Linear	Length (ft)	29,470	0.0	7,256	-	7,256	5,475	1,462	40	23,509
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	40	25.0	8	2	6				
	gas oil-production fields	Point	Area (acres)	1	0.0	0	-	-	2	0	0	6
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,664	25.0	333	83	250				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	188	0.0	0	-	-				
Upper_Roberts_Island	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	16.4	124	20	104				
	Transmission Line	Linear	Length (ft)	4,342	0.0	1,069	-	1,069	104	104	9	1,319
	gas oil wells	Point	Count	6	0.0	0	-	-				
Van_Sickle_Island	gas oil-production fields	Point	Area (acres)	148	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	25.8	391	101	290				
	Sewage Treatment	Point	Count	1	15.0	100,000	15,000	-	15,101	290	57	0
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,068	25.0	414	103	310				
Veale_Tract 1	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	85	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	4	100.0	132	132	-				
	Residential - Single Family Dwelling	Point	Count	23	39.1	4,672	1,828	2,844				
	Transmission Line	Linear	Length (ft)	12,208	0.0	3,930	-	3,930	2,063	2,844	32	4,241
Veale_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	73	25.0	15	4	11				
	NG Pipelines	Linear	Length (ft)	7	0.0	1	0	1				
	Residential - Single Family Dwelling	Point	Count	2	20.8	345	72	273	75	273	4	12
Venice_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	62,979	25.0	12,596	3,149	9,447				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	30	30	-	3,179	0	0	9,447
Victoria_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	66,424	25.0	13,285	3,321	9,964				
	hwy HAZUS SDURS	Linear	Length (ft)	5,687	25.0	1,877	469	1,408				
	NG Pipelines	Linear	Length (ft)	9,170	0.0	1,742	0	1,742				
	Residential - Manuf. Housing	Point	Count	1	100.0	25	25	-				
	Residential - Single Family Dwelling	Point	Count	3	100.0	772	772	0				
	Transmission Line	Linear	Length (ft)	9,614	0.0	3,095	-	3,095	4,587	0	0	16,209
	Communication HAZUS SDURS	Point	Count	3	0.0	354	0	354				
Walnut_Grove	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,282	25.0	1,083	271	812				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	23,843	25.0	4,769	1,192	3,576				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	279	0.0	0	-	-				
	hc ambulatory	Point	Count	1	2.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,000	0	4,000				
	Residential - Manuf. Housing	Point	Count	7	100.0	277	277	-				
	Residential - Single Family Dwelling	Point	Count	141	37.0	25,165	9,311	15,854	11,051	20,208	21,819	4,389
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,630	25.0	868	217	651				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,440	25.0	3,088	772	2,316				
Water_Zone 1	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	77	0.0	0	-	-				

	hwy HAZUS SDURS	Linear	Length (ft)	8,280	25.0	2,732	683	2,049				
	NG Pipelines	Linear	Length (ft)	411	0.0	115	0	115				
	Petroleum Pipelines	Linear	Length (ft)	4	0.0	4	0	4				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	15.5	26	4	22				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	15.5	14	2	12				
	Residential - Single Family Dwelling	Point	Count	2	16.4	729	119	610				
	Transmission Line	Linear	Length (ft)	165	0.0	41	-	41	1,798	643	7	5,176
Water Zone 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1	25.0	0	0	0				
	gas oil-production fields	Point	Area (acres)	35	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	1	0.0	0	-	0	0	0	0	0
Water Zone 3	Delta Roads PBSJ Major Roads	Linear	Length (ft)	0	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	0	25.0	0	0	0				
	gas oil-production fields	Point	Area (acres)	121	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	0	0.0	0	-	0	0	0	0	0
Water Zone 4	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	55	25.0	11	3	8				
	gas oil-production fields	Point	Area (acres)	4	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	0	0.0	0	0	10,000				
	Transmission Line	Linear	Length (ft)	0	0.0	0	-	0	3	0	0	8
Water Zone 5	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	0	0.0	0	0	0				
	Transmission Line	Linear	Length (ft)	0	0.0	0	-	0	0	0	0	0
Webb_Tract	gas oil wells	Point	Count	10	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	82	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,291	0.0	245	0	245				
	NG wells	Point	Count	1	0.0	0	-	-	0	0	0	245
Woodward_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,139	25.0	5,628	1,407	4,221				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	7,820	0.0	1,642	0	11,642				
	mokelumne aqueduct pipe	Linear	Length (ft)	23,350	0.0	116,749	8,873	0	10,280	0	0	5,863
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,701	25.0	1,940	485	1,455				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	53	53	0				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	100.0	42	42	0				
	Residential - Single Family Dwelling	Point	Count	4	39.1	829	324	505				
	Transmission Line	Linear	Length (ft)	32,244	0.0	7,939	-	7,939	904	505	116	9,394
Yolo_Bypass	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	982	25.0	196	49	147	49	0	0	147
Zone 14	gas oil wells	Point	Count	1	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,272	0.0	432	0	432	0	0	0	432
Zone 155	Transmission Line	Linear	Length (ft)	769	0.0	189	-	189	0	0	0	189
Zone 162	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,113	25.0	623	156	467				
	NG Pipelines	Linear	Length (ft)	1,544	0.0	293	0	293				
	Residential - Single Family Dwelling	Point	Count	5	16.4	951	156	795	311	795	53	760
Zone 186	Transmission Line	Linear	Length (ft)	13,335	0.0	3,283	-	3,283	0	0	0	3,283
Zone 206	Bridges not in HAZUS	Point	Count	1	0.0	1,000	0	1,000				
	Commercial - Entertainment and Recre	Point	Count	1	11.0	597	66	531				
	Commercial - Personal and Repair Ser	Point	Count	1	12.0	610	73	537				
	Commercial - Professional and Techni	Point	Count	1	16.0	582	93	489				
	Commercial - Retail Trade	Point	Count	1	14.0	302	42	260				
	Commercial - Wholesale Trade	Point	Count	1	8.0	1,174	94	1,080				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,861	25.0	614	154	461				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	455	25.0	91	23	68				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	3	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	31,151	0.0	31,151	0	31,151				
	rail 1000 nodes	Linear	Length (ft)	2	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,053	25.0	585	146	439	691	3,897	84	32,119
Zone 207	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,855	25.0	371	93	278				
	Petroleum Pipelines	Linear	Length (ft)	1,905	0.0	1,905	0	1,905				
	Rail HAZUS SDURS	Linear	Length (ft)	4,129	25.0	1,177	294	883	387	0	0	3,066
Zone 31	Residential - Single Family Dwelling	Point	Count	2	12.5	436	55	382	55	382	156	0
Zone 33	Residential - Single Family Dwelling	Point	Count	1	12.5	166	21	145	21	145	82	0
Zone 36	Residential - Multi Dwellings - 10 to 19	Point	Count	1	13.5	4	1	3				
	Residential - Single Family Dwelling	Point	Count	1	16.4	269	44	225				

	Solid Waste Facilities	Point	Count	1	0.0	0	-	-	45	228	39	0
Zone 37	Commercial - Entertainment and Recre	Point	Count	1	14.0	723	101	622				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	221	25.0	44	11	33				
	hwc ambulatory	Point	Count	1	2.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	60	25.0	20	5	15				
	Petroleum Pipelines	Linear	Length (ft)	487	0.0	487	0	487				
	Rail HAZUS SDURS	Linear	Length (ft)	495	25.0	141	35	106				
	Residential - Manuf. Housing	Point	Count	3	100.0	113	113	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	28.5	20	6	14				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	28.5	36	10	26				
	Residential - Single Family Dwelling	Point	Count	4	29.3	490	143	347	425	1,008	84	640
Zone 38	Commercial - Professional and Technic	Point	Count	1	28.0	21	6	15				
	Commercial - Retail Trade	Point	Count	1	18.0	15	3	12				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	450	25.0	90	22	67				
	hwy HAZUS SDURS	Linear	Length (ft)	95	25.0	31	8	23				
	Petroleum Pipelines	Linear	Length (ft)	1,314	0.0	1,314	0	1,314				
	Rail HAZUS SDURS	Linear	Length (ft)	1,559	25.0	444	111	333				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	15.5	1	0	1				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	15.5	8	1	7	151	35	5	1,738
	gas oil-production fields	Point	Area (acres)	2	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	12.5	392	49	343	49	343	299	0
Zone 64												
Zone 90	Hazmat HAZUS SDURS	Point	Count	2	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	26	0.0	26	0	26				
	Rail HAZUS SDURS	Linear	Length (ft)	13	25.0	4	1	3	1	0	0	29

Table 7 - 3b: Estimate of Asset Cost Damage by Island (100-year Flood) - Scour- Current

1	2	3	4	5	6	7	8	9	10	11	12	13
Island Name	Asset Type	Structure Type	Inventory Unit	GIS Quantity (current)	Percent Damage	Total Asset Value	100 Year Inundation Repair Costs (\$1,000)	Differential Repair Costs (\$1,000)	100 Year Inundation Repair Costs - By Island (\$1,000)	Differential Repair Costs for Point Assets - By Island (\$1000)	1,000ft Increment Repair Costs for Point Assets - By Island (\$1,000)	Differential Repair Costs for Linear Assets - By Island (\$1,000)
Bacon_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,752	25.0	6,350	1,588	4,763				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	12,115	0.0	3,695	0	3,695				
	Residential - Institutional Dormitory	Point	Count	3	100.0	9,953	9,953	0	11,541	0	0	8,458
Bethel_Island	boatlaunch	Point	Count	3	100.0	300	300	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	94,725	25.0	18,945	4,736	14,209				
	gas oil production fields	Point	Area	478	0.0	-	0	0				
	Gas oil wells	Point	Count	16	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	10,446	0.0	1,985	0	1,985				
	NG Wells	Point	Count	2	0.0	-	0	0				
	Residential - Duplex	Point	Count	4	100.0	1,323	1,323	0				
	Residential - Manuf. Housing	Point	Count	220	100.0	7,525	7,525	0				
	Residential - Single Family Dwelling	Point	Count	510	100.0	93,140	93,140	0				
	Utilities	Point	Count	1	0.0	-	0	0				
	water trans	Point	Count	2	0.0	-	0	0	107,024	0	0	16,193
	boatlaunch	Point	Count	1	100.0	100	100	0				
Bishop_Tract	Commercial-Retail Trade	Point	Count	1	30.0	18	5	13				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	64,590	25.0	12,918	3,229	9,688				
	gas oil production fields	Point	Area	83	0.0	-	0	0				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,207	25.0	1,718	430	1,289				
	Residential - Single Family Dwelling	Point	Count	273	43.6	56,420	24,613	31,807				
	transln ca	Linear	Length (ft)	16,663	0.0	4,103	0	4,103	30,378	37,819	864	15,080
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	150	25.0	30	7	22				
Bixler_Tract	gas oil production fields	Point	Area	86	0.0	-	0	0				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	3	32.6	754	246	508	253	508	165	22
	bridges not in HAZUS	Point	Count	1	25.0	1,000	250	750				
Boggs_Tract	Commercial-Professional - Technical S	Point	Count	1	22.0	7,163	1,576	5,587				
	Commercial-Retail Trade	Point	Count	1	16.0	3,399	544	2,855				
	Commercial-Wholesale Trade	Point	Count	9	11.0	20,441	2,249	18,192				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,927	25.0	3,276	819	2,457				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	67,157	25.0	13,431	3,358	10,074				
	Hazmat HAZUS SDURS	Point	Count	12	0.0	-	0	0				
	hc ambulatory	Point	Count	1	12.0	-	0	0				
	hc nursing res	Point	Count	1	7.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,165	25.0	715	179	536				
	Industrial - Heavy	Point	Count	2	15.0	7,436	1,115	6,321				
	Industrial - Light	Point	Count	1	17.0	2,395	407	1,988				
	Petroleum Pipelines	Linear	Length (ft)	13,029	0.0	2,736	0	2,736				
	pipeline trans	Point	Count	1	0.0	-	0	0				
	Port HAZUS SDURS	Point	Count	12	0.0	30,869	0	30,869				
	Rail 1000 nodes	Point	Count	2	0.0	-	0	0				
	Rail Bridge HAZUS SDURS	Point	Count	1	25.0	1,000	250	750				
	Rail Facility HAZUS SDURS	Point	Count	3	25.0	7,717	1,929	5,788				

	Rail HAZUS SDURS	Linear	Length (ft)	13,198	25.0	3,761	940	2,821				
	Residential - Duplex	Point	Count	26	25.5	7,408	1,889	5,519				
	Residential - Institutional Dormitory	Point	Count	1	14.0	1,489	208	1,281				
	Residential - Manuf. Housing	Point	Count	23	100.0	659	659	0				
	Residential - Single Family Dwelling	Point	Count	1,386	25.8	234,562	60,400	174,162				
	Schools HAZUS SDURS	Point	Count	2	0.0	1,180	0	1,180				
	sewage treat	Point	Count	1	30.0	100,000	30,000	0				
	solid waste facilities	Point	Count	1	25.0	-	0	0				
	TankFarms	Point	Count	5	0.0	1,500	0	1,500				
	Waste Water HAZUS SDURS	Point	Count	1	20.0	78,588	15,718	7,859	123,990	269,101	10,208	18,623
Bouldin_Island	Commercial-Professional - Technical S	Point	Count	1	100.0	3,585	3,585	0				
	Commercial-Retail Trade	Point	Count	1	100.0	561	561	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,505	25.0	497	124	373				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,545	25.0	8,509	2,127	6,382				
	Gas oil wells	Point	Count	14	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	18,408	25.0	6,075	1,519	4,556				
	Utilities	Point	Count	1	0.0	-	0	0	7,916	0	0	11,310
Brack_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,815	25.0	1,763	441	1,322				
	Gas oil wells	Point	Count	8	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	5,787	0.0	1,331	0	1,331				
	Residential - Manuf. Housing	Point	Count	4	100.0	147	147	0				
Bradford_Island	Residential - Single Family Dwelling	Point	Count	2	100.0	231	231	0	819	0	0	2,653
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	39,651	25.0	7,930	1,983	5,948				
	gas oil production fields	Point	Area	642	0.0	-	0	0				
	Gas oil wells	Point	Count	11	0.0	-	0	0				
Brannan-Andrus Island	NG Pipelines	Linear	Length (ft)	3,733	0.0	1,082	0	1,082				
	NG Wells	Point	Count	5	0.0	-	0	0				
	Residential - Duplex	Point	Count	1	100.0	97	97	0				
	Residential - Manuf. Housing	Point	Count	6	100.0	197	197	0				
	Residential - Single Family Dwelling	Point	Count	18	100.0	3,202	3,202	0	5,479	0	0	7,030
	air trans	Point	Count	1	0.0	-	0	0				
	boatlaunch	Point	Count	8	100.0	800	800	0				
	Commercial-Entertainment and Recrea	Point	Count	1	100.0	1,364	1,364	0				
Brannan-Andrus Island	Commercial-Professional - Technical S	Point	Count	1	100.0	2,533	2,533	0				
	Commercial-Retail Trade	Point	Count	1	100.0	2,078	2,078	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	22,069	25.0	7,283	1,821	5,462				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	187,578	25.0	37,516	9,379	28,137				
	gas oil production fields	Point	Area	3,872	0.0	-	0	0				
	Gas oil wells	Point	Count	88	0.0	-	0	0				
	hsc hospitals	Point	Count	1	100.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	34,137	25.0	11,265	2,816	8,449				
	NG Pipelines	Linear	Length (ft)	35,601	0.0	8,366	0	8,366				
	NG Wells	Point	Count	48	0.0	-	0	0				
	Residential - Duplex	Point	Count	4	100.0	2,033	2,033	0				
	Residential - Manuf. Housing	Point	Count	234	100.0	8,127	8,127	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	364	364	0				
	Residential - Single Family Dwelling	Point	Count	250	100.0	36,049	36,049	0				
	Residential - Triplex - Quads	Point	Count	2	100.0	1,653	1,653	0				
	solid waste facilities	Point	Count	1	25.0	-	0	0				
	transin ca	Linear	Length (ft)	2,649	0.0	652	0	652				
	water trans	Point	Count	2	0.0	-	0	0	70,017	3,000	16	51,066
Browns_Island	Hazmat HAZUS SDURS	Point	Count	2	0.0	-	0	0	0	0	0	0
Byron_Tract 1	Commercial-Professional - Technical S	Point	Count	1	100.0	1	1	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,419	25.0	1,684	421	1,263				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,850	25.0	2,260	565	1,695				
	Residential - Manuf. Housing	Point	Count	1	100.0	49	49	0				
	Residential - Single Family Dwelling	Point	Count	5	100.0	960	960	0				
	transin ca	Linear	Length (ft)	10,358	0.0	3,335	0	3,335	2,496	1,500	25	6,293
Byron_Tract 2	boatlaunch	Point	Count	1	100.0	100	100	0				
	bridges not in HAZUS	Point	Count	4	25.0	4,000	1,000	3,000				

	Commercial-Professional - Technical S	Point	Count	1	100.0	531	531	0				
	Commercial-Retail Trade	Point	Count	1	38.0	115	44	71				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,293	25.0	2,859	715	2,144				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	3	100.0	71	71	0				
	Residential - Single Family Dwelling	Point	Count	17	48.6	3,677	1,788	1,889				
	transln_ca	Linear	Length (ft)	27,721	0.0	8,925	0	8,925	4,248	4,960	236	11,069
Byron_Tract 3	Commercial-Professional - Technical S	Point	Count	1	28.0	804	225	579				
	Commercial-Retail Trade	Point	Count	1	18.0	253	46	207				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,543	25.0	709	177	531				
	Residential - Single Family Dwelling	Point	Count	107	29.3	27,429	8,023	19,406	8,471	20,192	4,490	531
Cache_Haas_Tract 1	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,004	25.0	661	165	496				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	95,936	25.0	19,187	4,797	14,390				
	gas oil production fields	Point	Area	1,351	0.0	-	0	0				
	Gas oil wells	Point	Count	39	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	16,802	0.0	3,192	0	3,192				
	NG Wells	Point	Count	1	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	44	44	0				
	Residential - Single Family Dwelling	Point	Count	9	39.1	1,371	536	835				
	transln_ca	Linear	Length (ft)	15,185	0.0	4,889	0	4,889	6,043	2,335	29	22,968
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,532	25.0	1,706	427	1,280				
	gas oil production fields	Point	Area	474	0.0	-	0	0				
Cache_Haas_Tract 2	Gas oil wells	Point	Count	15	0.0	-	0	0				
	NG Wells	Point	Count	1	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	17	17	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	775	775	0				
	transln_ca	Linear	Length (ft)	567	0.0	183	0	183	1,219	0	0	1,462
	Commercial-Professional - Technical S	Point	Count	1	100.0	727	727	0				
	Commercial-Retail Trade	Point	Count	1	42.0	477	200	277				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,555	25.0	911	228	683				
Canal Ranch	gas oil production fields	Point	Area	170	0.0	-	0	0				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	1,411	25.0	466	116	349				
	NG Pipelines	Linear	Length (ft)	1,065	0.0	202	0	202				
	Religion - Churches and Other Non-pro	Point	Count	1	19.0	1,258	239	1,019				
	Residential - Manuf. Housing	Point	Count	2	100.0	53	53	0	2,063	2,796	55	1,235
	Gas oil wells	Point	Count	2	0.0	-	0	0	0	0	0	0
	boatlanch	Point	Count	1	100.0	100	100	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	197	197	0				
Chilpps_Island	Commercial-Retail Trade	Point	Count	1	47.0	43	20	23				
	Residential - Single Family Dwelling	Point	Count	2	100.0	343	343	0				
	transln_ca	Linear	Length (ft)	9,886	0.0	3,183	0	3,183	660	23	1	3,183
Clifton Court Forebay Water	Commercial-Professional - Technical S	Point	Count	1	100.0	197	197	0				
	Commercial-Retail Trade	Point	Count	1	47.0	43	20	23				
Coney_Island	Residential - Single Family Dwelling	Point	Count	2	100.0	343	343	0				
	Residential - Manuf. Housing	Point	Count	9	100.0	305	305	0				
	Residential - Single Family Dwelling	Point	Count	60	100.0	12,858	12,858	0	13,163	0	0	0
	gas oil production fields	Point	Area	199	0.0	-	0	0				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
Deadhorse Island	NG Pipelines	Linear	Length (ft)	3,862	0.0	734	0	734				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	6	6	0				
	Residential - Single Family Dwelling	Point	Count	1	100.0	170	170	0	176	0	0	734
	transln_ca	Linear	Length (ft)	8,044	0.0	1,528	0	1,528	0	0	0	1,528
Decker_Island	NG Pipelines	Linear	Length (ft)	8,044	0.0	1,528	0	1,528	0	0	0	1,528
Discovery_Bay	boatlanch	Point	Count	1	100.0	100	100	0				
	Commercial-Banks	Point	Count	1	22.0	574	126	448				
	Commercial-Entertainment and Recrea	Point	Count	8	22.0	6,472	1,424	5,048				
	Commercial-Medical - Office Clinic	Point	Count	1	20.0	1,401	280	1,121				
	Commercial-Professional - Technical S	Point	Count	1	44.0	7,919	3,484	4,435				
	Commercial-Retail Trade	Point	Count	1	30.0	3,800	1,140	2,660				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	96,919	25.0	19,384	4,846	14,538				
	hc ambulatory	Point	Count	5	17.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,674	25.0	2,202	551	1,652				
	Residential - Duplex	Point	Count	1	45.5	1,229	559	670				
	transln_ca	Linear	Length (ft)	1,528	0.0	1,528	0	1,528				

	Residential - Manuf. Housing	Point	Count	1	100.0	109	109	0	324,329	417,511	18,566	16,190
	Residential - Single Family Dwelling	Point	Count	2,775	43.6	714,249	311,591	402,658				
	Schools HAZUS SDURS	Point	Count	1	20.0	590	118	472				
	water trans	Point	Count	1	0.0	-	0	0				
Egbert_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,752	0.0	2,550	0	2,550	705	0	0	4,537
	gas oil production fields	Point	Area	861	0.0	-	0	0				
	Gas oil wells	Point	Count	28	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	4,439	0.0	1,065	0	1,065				
	NG Wells	Point	Count	3	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	15	15	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	690	690	0				
Elk_Grove 1	transln.ca	Linear	Length (ft)	2,861	0.0	921	0	921	34,168	48,432	583	13,362
	bridges not in HAZUS	Point	Count	4	25.0	4,000	1,000	3,000				
	Commercial-Entertainment and Recrea	Point	Count	2	22.0	1,900	418	1,482				
	Commercial-Medical - Office Clinic	Point	Count	1	20.0	716	143	573				
	Commercial-Personal and Repair Serv	Point	Count	2	28.0	1,282	359	923				
	Commercial-Professional - Technical S	Point	Count	1	44.0	902	397	505				
	Commercial-Retail Trade	Point	Count	1	30.0	680	204	476				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	13,723	25.0	4,529	1,132	3,397				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,265	25.0	4,853	1,213	3,640				
	gas oil production fields	Point	Area	41	0.0	-	0	0				
	Gas oil wells	Point	Count	6	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,190	25.0	1,383	346	1,037				
	Industrial - High Technology	Point	Count	1	33.0	6,349	2,095	4,254				
	NG Pipelines	Linear	Length (ft)	6,580	0.0	2,138	0	2,138				
	NG Wells	Point	Count	1	0.0	-	0	0				
	Rail 1000 nodes	Point	Count	1	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	4,978	25.0	1,419	355	1,064				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	45.5	220	100	120				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	45.5	297	135	162				
	Residential - Single Family Dwelling	Point	Count	278	43.6	56,209	24,521	31,688				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln.ca	Linear	Length (ft)	8,472	0.0	2,086	0	2,086				
Empire_Tract	boatlaunch	Point	Count	1	100.0	100	100	0	2,277	0	0	5,549
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	36,993	25.0	7,399	1,850	5,549				
	Gas oil wells	Point	Count	4	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	3	100.0	127	127	0				
	Residential - Single Family Dwelling	Point	Count	2	100.0	200	200	0				
Fabian_Tract	air trans	Point	Count	1	0.0	-	0	0	7,109	2,329	27	11,510
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Retail Trade	Point	Count	1	42.0	128	54	74				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,032	25.0	1,331	333	998				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	51,951	25.0	10,390	2,598	7,793				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	1,817	0.0	345	0	345				
	Residential - Duplex	Point	Count	2	100.0	558	558	0				
	Residential - Institutional Dormitory	Point	Count	1	30.0	3,221	966	2,255				
	Residential - Manuf. Housing	Point	Count	7	100.0	266	266	0				
	Residential - Single Family Dwelling	Point	Count	15	100.0	2,235	2,235	0				
	transln.ca	Linear	Length (ft)	9,642	0.0	2,374	0	2,374				
Fay Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	112	25.0	22	6	17	6	0	0	17
Glanville_Tract	Commercial-Retail Trade	Point	Count	1	30.0	1	0	1				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,861	25.0	2,264	566	1,698				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	29,569	25.0	5,914	1,478	4,435				
	gas oil production fields	Point	Area	128	0.0	-	0	0				
	Gas oil wells	Point	Count	8	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,208	25.0	2,049	512	1,536				
	NG Pipelines	Linear	Length (ft)	383	0.0	124	0	124				
	Rail HAZUS SDURS	Linear	Length (ft)	4,114	25.0	1,173	293	879				
	Residential - Manuf. Housing	Point	Count	2	100.0	48	48	0				

Gileo_District	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	45.5	19	9	10	5,417	6,670	121	8,674
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	45.5	9	4	5				
	Residential - Single Family Dwelling	Point	Count	6	43.6	1,160	506	654				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	7,030	25.0	2,320	580	1,740				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	900	25.0	180	45	135				
	Hwy HAZUS SDURS	Linear	Length (ft)	267	25.0	88	22	66				
	Rail HAZUS SDURS	Linear	Length (ft)	7,101	25.0	2,024	506	1,518				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	7	7	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	807	807	0				
	transln_ca	Linear	Length (ft)	7,488	0.0	1,844	0	1,844				
Grand Island	boatlaunch	Point	Count	1	100.0	100	100	0	1,967	0	0	5,302
	Commercial-Professional - Technical S	Point	Count	1	100.0	935	935	0				
	Commercial-Retail Trade	Point	Count	1	100.0	1,194	1,194	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,301	25.0	1,089	272	817				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	127,834	25.0	25,567	6,392	19,175				
	gas oil production fields	Point	Area	760	0.0	-	0	0				
	Gas oil wells	Point	Count	34	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	65,548	25.0	21,631	5,408	16,223				
	Industrial - Light	Point	Count	2	100.0	4,435	4,435	0				
	NG Pipelines	Linear	Length (ft)	11,501	0.0	2,185	0	2,185				
	NG Wells	Point	Count	1	0.0	-	0	0				
	Residential - Duplex	Point	Count	3	100.0	1,032	1,032	0				
	Residential - Manuf. Housing	Point	Count	22	100.0	768	768	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	1,472	1,472	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	391	391	0				
	Residential - Single Family Dwelling	Point	Count	217	100.0	38,544	38,544	0				
	transln_ca	Linear	Length (ft)	13,185	0.0	3,246	0	3,246				
	US Cell Towers	Point	Count	1	0.0	250	0	250				
Hastings_Tract 1	Commercial-Retail Trade	Point	Count	1	47.0	3	1	2	1	2	0	0
	gas oil production fields	Point	Area	45	0.0	-	0	0				
Hastings_Tract 2	Commercial-Retail Trade	Point	Count	1	100.0	53	53	0	1,903	0	0	3,378
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,005	25.0	2,601	650	1,951				
	gas oil production fields	Point	Area	363	0.0	-	0	0				
	Gas oil wells	Point	Count	28	0.0	-	0	0				
	NG Wells	Point	Count	3	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	25	25	0				
	Residential - Single Family Dwelling	Point	Count	7	100.0	1,175	1,175	0				
	transln_ca	Linear	Length (ft)	4,432	0.0	1,427	0	1,427				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	119	25.0	39	10	29				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	196	25.0	39	10	29				
Holland_Land	Gas oil wells	Point	Count	2	0.0	-	0	0	1,019	0	0	2,522
	Hwy HAZUS SDURS	Linear	Length (ft)	9,792	25.0	3,231	808	2,424				
	Petroleum Pipelines	Linear	Length (ft)	96	0.0	20	0	20				
	Residential - Single Family Dwelling	Point	Count	1	100.0	192	192	0				
	transln_ca	Linear	Length (ft)	78	0.0	19	0	19				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	41,410	25.0	8,282	2,070	6,211				
	Gas oil wells	Point	Count	8	0.0	-	0	0				
Holland_Tract	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500	3,693	1,500	30	6,211
	Residential - Manuf. Housing	Point	Count	2	100.0	64	64	0				
	Residential - Single Family Dwelling	Point	Count	5	100.0	1,059	1,059	0				
	gas oil production fields	Point	Area	46	0.0	-	0	0				
Honker_Bay_Club	NG Pipelines	Linear	Length (ft)	4,395	0.0	835	0	835	65	112	6	1,842
	Petroleum Pipelines	Linear	Length (ft)	4,793	0.0	1,006	0	1,006				
	Residential - Single Family Dwelling	Point	Count	1	37.0	177	65	112				
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Professional - Technical S	Point	Count	1	47.0	1,426	670	756				
Hotchkiss_Tract 1	Commercial-Retail Trade	Point	Count	1	34.0	165	56	109				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	34,037	25.0	6,807	1,702	5,106				
	gas oil production fields	Point	Area	46	0.0	-	0	0				
	Gas oil wells	Point	Count	15	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				

	NG Pipelines	Linear	Length (ft)	12,515	0.0	2,378	0	2,378				
	NG Wells	Point	Count	3	0.0	-	0	0				
	Residential - Duplex	Point	Count	4	48.0	1,210	581	629				
	Residential - Manuf. Housing	Point	Count	69	100.0	2,448	2,448	0				
	Residential - Single Family Dwelling	Point	Count	220	46.6	40,001	18,650	21,351				
	Residential - Triplex - Quads	Point	Count	2	48.0	452	217	235				
Hotchkiss_Tract 2	transln ca	Linear	Length (ft)	14,067	0.0	4,529	0	4,529	24,924	24,579	847	12,013
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,378	25.0	876	219	657				
	gas oil production fields	Point	Area	633	0.0	-	0	0				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
Jersey_Island	NG Pipelines	Linear	Length (ft)	2,370	0.0	450	0	450	219	0	0	1,107
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,773	25.0	6,155	1,539	4,616				
	gas oil production fields	Point	Area	536	0.0	-	0	0				
	Gas oil wells	Point	Count	12	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	5,421	0.0	3,388	0	3,388				
	NG Wells	Point	Count	3	0.0	-	0	0				
Jones_Tract-Upper_and_Lower	Residential - Manuf. Housing	Point	Count	1	100.0	35	35	0				
	Residential - Single Family Dwelling	Point	Count	3	100.0	579	579	0				
	solid waste facilities	Point	Count	1	25.0	-	0	0				
	transln ca	Linear	Length (ft)	15,918	0.0	5,125	0	5,125	2,153	0	0	13,129
	bridges not in HAZUS	Point	Count	1	0.0	1,000	0	1,000				
	Commercial-Professional - Technical S	Point	Count	1	100.0	239	239	0				
	Commercial-Retail Trade	Point	Count	1	100.0	44	44	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	81,999	25.0	16,400	4,100	12,300				
	gas oil production fields	Point	Area	106	0.0	-	0	0				
	Gas oil wells	Point	Count	12	0.0	-	0	0				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,018	0.0	1,054	0	11,054				
	mokelumne aqueduct pipe	Linear	Length (ft)	14,985	0.0	74,924	5,694	0				
	NG Pipelines	Linear	Length (ft)	15,032	0.0	24,202	0	24,202				
	NG Storage	Point	Count	1	0.0	-	0	0				
Kasson_District	NG Wells	Point	Count	1	0.0	-	0	0				
	Rail Bridge HAZUS SDURS	Point	Count	1	0.0	1,000	0	1,000				
	Rail HAZUS SDURS	Linear	Length (ft)	5,678	100.0	1,618	8,000	0				
	Residential - Manuf. Housing	Point	Count	3	100.0	76	76	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	482	482	0	18,635	2,000	23	37,556
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,696	25.0	339	85	254				
King_Island	Gas oil wells	Point	Count	4	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	10	43.6	1,419	619	800				
	transln ca	Linear	Length (ft)	9,505	0.0	2,340	0	2,340	704	800	37	2,595
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Entertainment and Recrea	Point	Count	1	100.0	463	463	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	488	488	0				
Libby_McNeil_Tract 1	Commercial-Retail Trade	Point	Count	1	100.0	3,544	3,544	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	33,844	25.0	6,769	1,692	5,077				
	gas oil production fields	Point	Area	151	0.0	-	0	0				
	Gas oil wells	Point	Count	6	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Wells	Point	Count	2	0.0	-	0	0				
	Residential - Duplex	Point	Count	1	100.0	123	123	0				
	Residential - Institutional Dormitory	Point	Count	1	100.0	2,364	2,364	0				
	Residential - Manuf. Housing	Point	Count	42	100.0	1,405	1,405	0				
	Residential - Single Family Dwelling	Point	Count	17	100.0	2,211	2,211	0				
	water trans	Point	Count	1	0.0	-	0	0				
	Commercial-Professional - Technical S	Point	Count	1	41.0	555	228	327	13,390	3,000	73	5,077
	Commercial-Retail Trade	Point	Count	1	26.0	668	174	494				
	Communication HAZUS SDURS	Point	Count	1	100.0	118	118	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,110	25.0	1,686	422	1,265				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,178	25.0	2,036	509	1,527				
	gas oil production fields	Point	Area	143	0.0	-	0	0				
	Gas oil wells	Point	Count	7	0.0	-	0	0				
	Residential - Duplex	Point	Count	4	43.0	1,164	501	663				
	Residential - Manuf. Housing	Point	Count	2	100.0	81	81	0				

Libby_McNeil_Tract 2	Residential - Single Family Dwelling	Point	Count	41	39.1	7,404	2,897	4,507	4,928	5,992	1,035	2,791
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Retail Trade	Point	Count	1	30.0	1	0	1				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	345	25.0	69	17	52				
	gas oil production fields	Point	Area	42	0.0	-	0	0				
Liberte Island	Residential - Single Family Dwelling	Point	Count	4	43.6	688	300	388	418	389	61	52
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,521	25.0	2,304	576	1,728				
	gas oil production fields	Point	Area	470	0.0	-	0	0				
	Gas oil wells	Point	Count	18	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
Lincoln_Village_Tract	NG Pipelines	Linear	Length (ft)	21,289	0.0	4,045	0	4,045	1,076	1,500	21	5,773
	Commercial-Entertainment and Recrea	Point	Count	5	18.0	4,338	781	3,557				
	Commercial-Professional - Technical S	Point	Count	1	38.0	3,142	1,194	1,948				
	Commercial-Retail Trade	Point	Count	1	23.0	4,761	1,095	3,666				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	123,035	25.0	24,607	6,152	18,455				
Lisbon_District	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,210	25.0	1,389	347	1,042				
	Religion - Churches and Other Non-pr	Point	Count	1	13.0	1,948	253	1,695				
	Residential - Duplex	Point	Count	47	38.5	12,104	4,660	7,444				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	38.5	11,552	4,448	7,104				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	20	38.5	32,750	12,609	20,141				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	38.5	35,918	13,828	22,090				
	Residential - Single Family Dwelling	Point	Count	2,835	37.0	518,455	191,828	326,627				
	Residential - Triplex - Quads	Point	Count	53	38.5	14,315	5,511	8,804				
	Schools HAZUS SDURS	Point	Count	9	7.0	5,310	372	4,938				
	water trans	Point	Count	1	0.0	-	0	0	245,078	414,014	17,758	19,497
	airport points	Point	Count	1	25.0	-	0	0				
	Airports HAZUS SDURS	Point	Count	1	25.0	6,431	1,608	4,823				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	20,168	25.0	6,655	1,664	4,992				
Little_Holland_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,199	25.0	3,640	910	2,730				
	gas oil production fields	Point	Area	20	0.0	-	0	0				
	Gas oil wells	Point	Count	6	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	4,754	25.0	1,355	339	1,016				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	127	127	0				
	Residential - Single Family Dwelling	Point	Count	22	100.0	4,002	4,002	0				
	Runway HAZUS SDURS	Point	Count	1	25.0	36,674	9,169	27,506				
	transln ca	Linear	Length (ft)	4,742	0.0	1,168	0	1,168				
	US Cell Towers	Point	Count	1	0.0	250	0	250	17,818	32,579	561	9,905
	gas oil production fields	Point	Area	88	0.0	-	0	0				
Little_Egbert_Tract	Gas oil wells	Point	Count	2	0.0	-	0	0	0	0	0	0
	Commercial-Professional - Technical S	Point	Count	1	100.0	1	1	0				
	Commercial-Retail Trade	Point	Count	1	100.0	1	1	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	150	25.0	49	12	37				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,956	25.0	2,191	548	1,643				
	gas oil production fields	Point	Area	895	0.0	-	0	0				
	Gas oil wells	Point	Count	21	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,495	25.0	1,813	453	1,360				
	NG Pipelines	Linear	Length (ft)	8,586	0.0	2,061	0	2,061				
	NG Wells	Point	Count	2	0.0	-	0	0				
	Residential - Duplex	Point	Count	1	100.0	122	122	0				
	Residential - Manuf. Housing	Point	Count	4	100.0	130	130	0				
	Residential - Single Family Dwelling	Point	Count	33	100.0	5,934	5,934	0	7,701	1,500	29	5,101
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,657	25.0	931	233	698				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	20	20	0				
	Residential - Single Family Dwelling	Point	Count	1	46.6	125	58	67	311	67	15	698
Mandeville_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	26,062	25.0	5,212	1,303	3,909				
	Gas oil wells	Point	Count	4	0.0	-	0	0	1,303	0	0	3,909
McCormack_Williamson_Tract	Communication HAZUS SDURS	Point	Count	2	100.0	236	236	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,822	25.0	2,964	741	2,223				
	gas oil production fields	Point	Area	805	0.0	-	0	0				

McDonald_Tract	gas oil production fields	Point	Area	602	0.0	-	0	0	977	0	0	3,116
	Gas oil wells	Point	Count	18	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	4,699	0.0	893	0	893				
McMullin_Ranch-River_Junction	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,770	25.0	10,554	2,639	7,916	7,392	0	0	9,512
	Gas oil wells	Point	Count	48	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	5,235	0.0	1,597	0	1,597				
Medford_Island	Residential - Institutional Dormitory	Point	Count	1	100.0	4,753	4,753	0	5,350	4,597	98	11,720
	Commercial-Retail Trade	Point	Count	1	34.0	30	10	20				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	14,242	25.0	4,700	1,175	3,525				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	17,076	25.0	3,415	854	2,561				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	5,372	0.0	1,397	0	1,397				
	Residential - Manuf. Housing	Point	Count	4	100.0	123	123	0				
	Residential - Single Family Dwelling	Point	Count	35	46.6	5,765	2,688	3,077				
	transln ca	Linear	Length (ft)	17,210	0.0	4,237	0	4,237				
Merritt Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,314	25.0	5,663	1,416	4,247	3,172	0	0	4,247
	Residential - Institutional Dormitory	Point	Count	1	100.0	1,756	1,756	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	282	282	0				
	Commercial-Retail Trade	Point	Count	1	100.0	62	62	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	20,405	25.0	6,734	1,683	5,050				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	54,368	25.0	10,874	2,718	8,155				
	gas oil production fields	Point	Area	159	0.0	-	0	0				
	Gas oil wells	Point	Count	11	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	3	100.0	135	135	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	90	90	0				
Middle_Roberts_Island	Residential - Single Family Dwelling	Point	Count	57	100.0	9,891	9,891	0	14,862	0	0	13,206
	boatlaunch	Point	Count	3	100.0	300	300	0				
	Commercial-Personal and Repair Serv	Point	Count	1	43.0	613	264	349				
	Commercial-Professional - Technical S	Point	Count	1	100.0	358	358	0				
	Commercial-Retail Trade	Point	Count	1	47.0	84	39	45				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	12,305	25.0	4,061	1,015	3,045				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	123,062	25.0	24,612	6,153	18,459				
	gas oil production fields	Point	Area	884	0.0	-	0	0				
	Gas oil wells	Point	Count	29	0.0	-	0	0				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	8,230	0.0	1,728	0	11,728				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	18,586	25.0	6,133	1,533	4,600				
	mokelumne aqueduct pipe	Linear	Length (ft)	22,309	0.0	111,543	8,477	0				
	NG Pipelines	Linear	Length (ft)	17,099	0.0	3,249	0	3,249				
	NG Wells	Point	Count	12	0.0	-	0	0				
	Petroleum Pipelines	Linear	Length (ft)	3,641	0.0	765	0	765				
	Rail HAZUS SDURS	Linear	Length (ft)	7,982	25.0	2,275	569	1,706				
	Residential - Duplex	Point	Count	4	100.0	1,216	1,216	0				
	Residential - Institutional Dormitory	Point	Count	1	34.0	6,424	2,184	4,240				
	Residential - Manuf. Housing	Point	Count	19	100.0	638	638	0				
Netherlands 1	Residential - Single Family Dwelling	Point	Count	58	100.0	8,873	8,873	0	32,120	6,134	34	44,026
	solid waste facilities	Point	Count	1	25.0	-	0	0				
	transln ca	Linear	Length (ft)	42,538	0.0	10,473	0	10,473				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	430	25.0	86	21	64				
	gas oil production fields	Point	Area	199	0.0	-	0	0				
	Gas oil wells	Point	Count	9	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	9,046	25.0	2,985	746	2,239				
Netherlands 2	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	13	13	0	1,194	0	0	2,303
	Residential - Single Family Dwelling	Point	Count	2	100.0	413	413	0				
	air trans	Point	Count	1	0.0	-	0	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	10	10	0				
	Commercial-Retail Trade	Point	Count	1	100.0	468	468	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	12,897	25.0	4,256	1,064	3,192				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	170,540	25.0	34,108	8,527	25,581				
	Fire Stations HAZUS SDURS	Point	Count	1	100.0	708	708	0				
	gas oil production fields	Point	Area	281	0.0	-	0	0				

	Gas oil wells	Point	Count	27	0.0	-	0	0						
	Hazmat HAZUS SDURS	Point	Count	1	0.0	-	0	0						
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500						
	Hwy HAZUS SDURS	Linear	Length (ft)	8,796	25.0	2,903	726	2,177						
	Rail 1000 nodes	Point	Count	2	0.0	-	0	0						
	Rail HAZUS SDURS	Linear	Length (ft)	7,594	25.0	2,164	541	1,623						
	Residential - Manuf. Housing	Point	Count	4	100.0	168	168	0						
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	591	591	0						
	Residential - Single Family Dwelling	Point	Count	153	100.0	27,394	27,394	0						
	Schools HAZUS SDURS	Point	Count	2	11.0	1,180	130	1,050	40,827	2,550	17	32,573		
New Hope Tract	boatlaunch	Point	Count	2	100.0	200	200	0						
	Commercial-Professional - Technical S	Point	Count	1	47.0	122	57	65						
	Commercial-Retail Trade	Point	Count	1	34.0	399	136	263						
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,881	25.0	3,261	815	2,446						
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	17,198	25.0	3,440	860	2,580						
	gas oil production fields	Point	Area	791	0.0	-	0	0						
	Gas oil wells	Point	Count	24	0.0	-	0	0						
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500						
	Hwy HAZUS SDURS	Linear	Length (ft)	4,295	25.0	1,417	354	1,063						
	NG Pipelines	Linear	Length (ft)	13,563	0.0	2,577	0	2,577						
	NG Wells	Point	Count	2	0.0	-	0	0						
	Rail HAZUS SDURS	Linear	Length (ft)	5,103	25.0	1,454	364	1,091						
	Residential - Manuf. Housing	Point	Count	33	100.0	1,125	1,125	0						
	Residential - Single Family Dwelling	Point	Count	37	46.6	5,264	2,454	2,810						
	US Cell Towers	Point	Count	2	0.0	500	0	500	6,865	5,138	82	9,756		
	Orwood Tract	Commercial-Professional - Technical S	Point	Count	1	100.0	384	384	0					
		Commercial-Retail Trade	Point	Count	1	100.0	27	27	0					
Delta Roads PBSJ Minor Roads		Linear	Length (ft)	13,367	25.0	2,673	668	2,005						
Gas oil wells		Point	Count	3	0.0	-	0	0						
gas pipeline kinder morgan LS 9		Linear	Length (ft)	14,840	0.0	3,116	0	13,116						
mokelumne aqueduct pipe		Linear	Length (ft)	40,546	0.0	202,729	15,407	0						
NG Pipelines		Linear	Length (ft)	6,469	0.0	1,811	0	1,811						
Residential - Manuf. Housing		Point	Count	1	100.0	22	22	0						
Residential - Single Family Dwelling		Point	Count	87	100.0	22,264	22,264	0						
transln_ca		Linear	Length (ft)	8,083	0.0	2,602	0	2,602	38,773	0	0	9,535		
Palm Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,442	25.0	4,888	1,222	3,666						
	gas oil production fields	Point	Area	100	0.0	-	0	0						
	Gas oil wells	Point	Count	1	0.0	-	0	0						
	NG Pipelines	Linear	Length (ft)	10,249	0.0	2,870	0	2,870						
	Rail HAZUS SDURS	Linear	Length (ft)	12,627	25.0	3,599	900	2,699						
	Residential - Manuf. Housing	Point	Count	1	100.0	47	47	0						
	Residential - Single Family Dwelling	Point	Count	9	100.0	1,978	1,978	0						
transln_ca	Linear	Length (ft)	5,169	0.0	1,664	0	1,664	4,147	0	0	10,899			
Paradise Junction	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,573	25.0	849	212	637						
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,550	25.0	3,110	778	2,333						
	Gas oil wells	Point	Count	4	0.0	-	0	0						
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500						
	Hwy HAZUS SDURS	Linear	Length (ft)	1,557	25.0	514	128	385						
	Rail HAZUS SDURS	Linear	Length (ft)	3,746	25.0	1,068	267	801						
	Residential - Institutional Dormitory	Point	Count	4	23.0	16,213	3,729	12,484						
	Residential - Manuf. Housing	Point	Count	1	100.0	28	28	0						
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	48.0	7	3	4						
	Residential - Single Family Dwelling	Point	Count	10	46.6	1,462	682	780						
	Substation CA	Point	Count	1	25.0	1,000	250	750						
	transln_ca	Linear	Length (ft)	11,558	0.0	2,846	0	2,846	7,577	18,518	583	7,001		
	Pescadero	Commercial-Professional - Technical S	Point	Count	1	47.0	1,073	504	569					
Commercial-Retail Trade		Point	Count	1	34.0	173	59	114						
Delta Roads PBSJ Major Roads		Linear	Length (ft)	2,697	25.0	890	222	667						
Delta Roads PBSJ Minor Roads		Linear	Length (ft)	40,157	25.0	8,031	2,008	6,024						
gas oil production fields		Point	Area	9	0.0	-	0	0						
Gas oil wells		Point	Count	5	0.0	-	0	0						
Hazmat HAZUS SDURS		Point	Count	7	0.0	-	0	0						

	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500	38,794	8,662	168	14,918
	Hwy HAZUS SDURS	Linear	Length (ft)	14,226	25.0	4,695	1,174	3,521				
	NG Pipelines	Linear	Length (ft)	1,699	0.0	323	0	323				
	Petroleum Pipelines	Linear	Length (ft)	1,067	0.0	224	0	224				
	Rail HAZUS SDURS	Linear	Length (ft)	256	25.0	73	18	55				
	Residential - Manuf. Housing	Point	Count	7	100.0	267	267	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	48.0	82	39	43				
	Residential - Single Family Dwelling	Point	Count	35	46.6	6,439	3,002	3,437				
	sewage treat	Point	Count	1	30.0	100,000	30,000	0				
	transln ca	Linear	Length (ft)	16,671	0.0	4,105	0	4,105				
	gas oil production fields	Point	Area	443	0.0	-	0	0				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
Peter Pocket	NG Pipelines	Linear	Length (ft)	4,331	0.0	823	0	823	201	231	9	1,101
	NG Wells	Point	Count	2	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	2	46.6	432	201	231				
	transln ca	Linear	Length (ft)	864	0.0	278	0	278				
	Commercial-Professional - Technical S	Point	Count	1	47.0	1,555	731	824				
	Commercial-Retail Trade	Point	Count	1	34.0	372	126	246				
Pico_Naglee_Tract	Delta Roads PBSJ Major Roads	Linear	Length (ft)	22,049	25.0	7,276	1,819	5,457	11,930	10,938	223	17,844
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,145	25.0	6,029	1,507	4,522				
	Gas oil wells	Point	Count	7	0.0	-	0	0				
	Hazmat HAZUS SDURS	Point	Count	1	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	16,204	0.0	3,079	0	3,079				
	Rail 1000 nodes	Point	Count	1	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	2,786	25.0	794	199	596				
	Residential - Manuf. Housing	Point	Count	2	100.0	143	143	0				
	Residential - Single Family Dwelling	Point	Count	68	46.6	14,274	6,655	7,619				
	Substation, CA	Point	Count	1	25.0	1,000	250	750				
	transln ca	Linear	Length (ft)	17,024	0.0	4,191	0	4,191				
	Utilities	Point	Count	1	0.0	-	0	0				
Pierson_Tract	Commercial-Professional - Technical S	Point	Count	1	100.0	493	493	0	19,730	3,944	51	16,463
	Commercial-Retail Trade	Point	Count	1	100.0	199	199	0				
	Communication HAZUS SDURS	Point	Count	3	100.0	354	354	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,519	25.0	2,811	703	2,108				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	68,367	25.0	13,673	3,418	10,255				
	Fire Stations HAZUS SDURS	Point	Count	1	100.0	708	708	0				
	gas oil production fields	Point	Area	149	0.0	-	0	0				
	Gas oil wells	Point	Count	10	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	11,721	25.0	3,868	967	2,901				
	Residential - Duplex	Point	Count	1	100.0	531	531	0				
	Residential - Manuf. Housing	Point	Count	8	100.0	297	297	0				
	Residential - Single Family Dwelling	Point	Count	79	100.0	10,824	10,824	0				
	Schools HAZUS SDURS	Point	Count	2	20.0	1,180	236	944				
	transln ca	Linear	Length (ft)	4,868	0.0	1,199	0	1,199				
Pittsburg	Commercial-Personal and Repair Serv	Point	Count	1	16.0	1,114	178	936				
	Commercial-Professional - Technical S	Point	Count	1	28.0	522	146	376				
	Commercial-Retail Trade	Point	Count	1	18.0	625	113	513				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,213	25.0	2,050	513	1,538				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,125	25.0	825	206	619				
	Industrial - Construction	Point	Count	1	43.0	1,699	731	968				
	NG Pipelines	Linear	Length (ft)	10,040	0.0	1,908	0	1,908				
	Petroleum Pipelines	Linear	Length (ft)	5,423	0.0	1,139	0	1,139				
	Port HAZUS SDURS	Point	Count	1	0.0	2,572	0	2,572				
	Rail 1000 nodes	Point	Count	4	0.0	-	0	0				
	Rail Bridge HAZUS SDURS	Point	Count	1	25.0	1,000	250	750				
	Rail HAZUS SDURS	Linear	Length (ft)	14,710	25.0	4,192	1,048	3,144				
	Residential - Duplex	Point	Count	4	28.5	1,365	389	976				
	Residential - Manuf. Housing	Point	Count	1	100.0	36	36	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	28.5	1,101	314	787				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	28.5	304	87	217				

	Residential - Single Family Dwelling	Point	Count	97	29.3	18,625	5,448	13,177				
	Residential - Triplex - Quads	Point	Count	4	28.5	970	276	694				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	37,606	0.0	9,259	0	9,259				
	Utilities	Point	Count	1	0.0	-	0	0	9,984	22,716	628	17,606
Prospect_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,398	25.0	1,080	270	810				
	gas oil production fields	Point	Area	300	0.0	-	0	0				
	Gas oil wells	Point	Count	12	0.0	-	0	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	1	1	0				
	Residential - Single Family Dwelling	Point	Count	2	100.0	448	448	0	719	0	0	810
Quimby_Island	bridges not in HAZUS	Point	Count	1	25.0	1,000	250	750				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	1	100.0	84	84	0	334	750	57	0
RD 17 (Mosssdale)	boatlaunch	Point	Count	3	100.0	300	300	0				
	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
	Commercial-Banks	Point	Count	1	15.0	273	41	232				
	Commercial-Professional - Technical S	Point	Count	1	35.0	1,356	475	881				
	Commercial-Retail Trade	Point	Count	1	20.0	569	114	455				
	Commercial-Wholesale Trade	Point	Count	1	16.0	1,758	281	1,477				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	7,373	25.0	2,433	608	1,825				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	107,689	25.0	21,538	5,384	16,153				
	gas oil production fields	Point	Area	201	0.0	-	0	0				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	6	25.0	12,000	3,000	9,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,936	25.0	1,959	490	1,469				
	Industrial - Heavy	Point	Count	2	22.0	4,483	986	3,497				
	Rail HAZUS SDURS	Linear	Length (ft)	2,002	25.0	571	143	428				
	Residential - Duplex	Point	Count	1	32.0	232	74	158				
	Residential - Manuf. Housing	Point	Count	27	100.0	1,052	1,052	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	32.0	122	39	83				
	Residential - Single Family Dwelling	Point	Count	870	32.6	175,045	57,108	117,937				
	Residential - Triplex - Quads	Point	Count	1	32.0	157	50	107				
	transln_ca	Linear	Length (ft)	43,438	0.0	10,695	0	10,695	70,646	135,326	1,660	30,570
Rindge_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	85,006	0.0	17,001	0	17,001				
	Gas oil wells	Point	Count	9	0.0	-	0	0				
	NG Wells	Point	Count	4	0.0	-	0	0				
	Residential - Duplex	Point	Count	1	100.0	181	181	0				
	Residential - Manuf. Housing	Point	Count	2	100.0	83	83	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	534	534	0				
	US Cell Towers	Point	Count	1	0.0	250	0	250	798	250	3	17,001
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,927	25.0	585	146	439				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,253	25.0	1,404	351	1,053				
	transln_ca	Linear	Length (ft)	17,492	0.0	4,307	0	4,307	997	1,500	57	5,798
Roberts_Island	boatlaunch	Point	Count	1	0.0	100	0	100	0	100	58	0
Rough_and_Ready_Island	air trans	Point	Count	1	0.0	-	0	0				
	Commercial-Entertainment and Recrea	Point	Count	1	20.0	580	116	464				
	Commercial-Personal and Repair Serv	Point	Count	1	25.0	1,081	270	811				
	Commercial-Professional - Technical S	Point	Count	1	41.0	215	88	127				
	Commercial-Retail Trade	Point	Count	1	26.0	656	171	485				
	Commercial-Wholesale Trade	Point	Count	2	22.0	5,308	1,168	4,140				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,110	25.0	1,686	422	1,265				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	63,076	25.0	12,615	3,154	9,461				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Government - General Services	Point	Count	11	17.0	13,444	2,285	11,159				
	Hazmat HAZUS SDURS	Point	Count	3	0.0	-	0	0				
	Industrial - Heavy	Point	Count	1	30.0	1,443	433	1,010				
	Petroleum Pipelines	Linear	Length (ft)	8,192	0.0	1,720	0	1,720				
	Rail 1000 nodes	Point	Count	5	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	20,938	25.0	5,967	1,492	4,476				
	Residential - Duplex	Point	Count	2	43.0	576	248	328				

	Residential - Manuf. Housing	Point	Count	8	100.0	266	266	0	10,778	20,160	771	16,922
	Residential - Single Family Dwelling	Point	Count	13	39.1	1,701	666	1,035				
	TankFarms	Point	Count	2	0.0	600	0	600				
Ryer Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,851	25.0	611	153	458	11,031	1,500	15	18,146
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	44,230	25.0	8,846	2,212	6,635				
	gas oil production fields	Point	Area	46	0.0	-	0	0				
	Gas oil wells	Point	Count	10	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	44,661	25.0	14,738	3,684	11,053				
	Residential - Manuf. Housing	Point	Count	2	100.0	96	96	0				
	Residential - Single Family Dwelling	Point	Count	23	100.0	4,386	4,386	0				
Sacramento_Pocket_Area	boatlaunch	Point	Count	3	100.0	300	300	0	1,366,133	1,804,749	14,275	141,955
	bridges not in HAZUS	Point	Count	45	25.0	45,000	11,250	33,750				
	Commercial-Banks	Point	Count	80	22.0	61,080	13,438	47,642				
	Commercial-Entertainment and Recrea	Point	Count	64	22.0	57,759	12,707	45,052				
	Commercial-Medical - Office Clinic	Point	Count	2	20.0	4,839	968	3,871				
	Commercial-Personal and Repair Serv	Point	Count	12	28.0	17,461	4,889	12,572				
	Commercial-Professional - Technical S	Point	Count	14	44.0	151,934	66,851	85,083				
	Commercial-Retail Trade	Point	Count	4	30.0	63,311	18,993	44,318				
	Commercial-Wholesale Trade	Point	Count	14	25.0	36,965	9,241	27,724				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	100,193	25.0	33,064	8,266	24,798				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	536,173	25.0	107,235	26,809	80,426				
	freoport pipe route preferred	Linear	Length (ft)	6,456	0.0	-	0	0				
	Gas oil wells	Point	Count	10	0.0	-	0	0				
	Government - General Services	Point	Count	21	19.0	24,520	4,659	19,861				
	hc ambulatory	Point	Count	18	17.0	-	0	0				
	hc nursing res	Point	Count	5	16.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	5	25.0	10,000	2,500	7,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	60,183	25.0	19,861	4,965	14,895				
	Industrial - Construction	Point	Count	4	100.0	10,382	10,382	0				
	Industrial - Heavy	Point	Count	9	35.0	24,585	8,605	15,980				
	Industrial - Light	Point	Count	2	35.0	6,872	2,405	4,467				
	NG Pipelines	Linear	Length (ft)	18,083	0.0	5,877	0	5,877				
	Petroleum Pipelines	Linear	Length (ft)	16,466	0.0	3,458	0	3,458				
	Rail 1000 nodes	Point	Count	16	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	2,252	25.0	642	160	481				
	Religion - Churches and Other Non-pr	Point	Count	4	14.0	11,202	1,568	9,634				
	Residential - Duplex	Point	Count	159	45.5	46,151	20,999	25,152				
	Residential - Institutional Dormitory	Point	Count	23	20.0	91,050	18,210	72,840				
	Residential - Manuf. Housing	Point	Count	17	100.0	832	832	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	9	45.5	36,356	16,542	19,814				
	Residential - Multi-Dwellings - 20 to 49	Point	Count	3	45.5	55,633	25,313	30,320				
	Residential - Multi-Dwellings - 5 to 9 un	Point	Count	66	45.5	112,983	51,407	61,576				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	15	45.5	175,381	79,798	95,583				
	Residential - Single Family Dwelling	Point	Count	10,468	43.6	1,967,468	658,308	1,109,160				
	Residential - Triplex - Quads	Point	Count	174	45.5	55,698	25,343	30,355				
	Schools HAZUS SDURS	Point	Count	3	24.0	1,770	425	1,345				
	sewage treat	Point	Count	3	30.0	200,000	60,000	0				
	superfund sites	Point	Count	1	0.0	-	0	0				
	TankFarms	Point	Count	3	0.0	900	0	900				
	transln ca	Linear	Length (ft)	48,817	0.0	12,019	0	12,019				
	US Cell Towers	Point	Count	1	0.0	250	0	250				
	Utilities	Point	Count	2	0.0	-	0	0				
Sargent_Barnhart_Tract 1	Commercial-Professional - Technical S	Point	Count	1	11.0	1	0	1				
	Commercial-Retail Trade	Point	Count	1	9.0	10	1	9				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,550	25.0	2,110	527	1,582				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	4	0.0	1	0	10,001				
	Residential - Duplex	Point	Count	13	15.5	3,575	554	3,021				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	15.5	400	62	338				
	Residential - Multi-Dwellings - 5 to 9 un	Point	Count	1	15.5	2,296	358	1,940				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	15.5	8,224	1,275	6,949				
	Residential - Single Family Dwelling	Point	Count	173	16.4	28,865	4,727	24,138				

Sargent_Barnhart_Tract 2	Residential - Triplex - Quads	Point	Count	6	15.5	1,948	302	1,646	7,845	38,591	5,328	1,583
	Schools_HAZUS_SDURS	Point	Count	1	7.0	590	41	549				
	air_trans	Point	Count	1	0.0	-	0	0				
Sargent_Barnhart_Tract 2	Commercial-Banks	Point	Count	7	19.0	5,454	1,036	4,418	335,289	496,000	11,799	38,416
	Commercial-Entertainment and Recrea	Point	Count	13	20.0	13,521	2,704	10,817				
	Commercial-Medical - Office Clinic	Point	Count	9	18.0	10,007	1,801	8,206				
	Commercial-Personal and Repair Serv	Point	Count	6	25.0	5,372	1,343	4,029				
	Commercial-Professional - Technical S	Point	Count	4	41.0	42,071	17,249	24,822				
	Commercial-Retail Trade	Point	Count	1	26.0	6,767	1,759	5,008				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,901	25.0	1,617	404	1,213				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	189,517	25.0	37,903	9,476	28,428				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	13,189	0.0	2,770	0	12,770				
	hc ambulatory	Point	Count	49	16.0	-	0	0				
	hc hospitals	Point	Count	1	100.0	-	0	0				
	hc nursing res	Point	Count	2	16.0	-	0	0				
	Hwy Bridge HAZUS_SDURS	Point	Count	10	25.0	20,000	5,000	15,000				
	Hwy HAZUS_SDURS	Linear	Length (ft)	5,360	25.0	1,769	442	1,327				
	mokelumne aqueduct pipe	Linear	Length (ft)	39,318	0.0	196,589	14,941	0				
	Petroleum Pipelines	Linear	Length (ft)	13,195	0.0	2,771	0	2,771				
	Residential - Duplex	Point	Count	60	43.0	15,748	6,772	8,976				
	Residential - Manuf. Housing	Point	Count	14	100.0	699	699	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	43.0	7,138	3,069	4,069				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	23	43.0	37,812	16,259	21,553				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	43.0	46,490	19,991	26,499				
	Residential - Single Family Dwelling	Point	Count	2,719	39.1	571,250	223,502	347,748				
	Residential - Triplex - Quads	Point	Count	65	43.0	19,157	8,238	10,919				
	Schools_HAZUS_SDURS	Point	Count	6	10.0	3,540	354	3,186				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	7,749	0.0	1,908	0	1,908				
Sargent_Barnhart_Tract 3	boatlaunch	Point	Count	1	100.0	100	100	0	5,914	8,567	6,181	238
	Commercial-Entertainment and Recrea	Point	Count	5	26.0	4,101	1,066	3,035				
	Commercial-Personal and Repair Serv	Point	Count	1	32.0	626	200	426				
	Commercial-Professional - Technical S	Point	Count	1	47.0	2,435	1,144	1,291				
	Commercial-Retail Trade	Point	Count	1	34.0	150	51	99				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,583	25.0	317	79	238				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	48.0	63	30	33				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	1	48.0	553	265	288				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	48.0	230	110	120				
	Residential - Single Family Dwelling	Point	Count	29	46.6	5,966	2,782	3,184				
	Residential - Triplex - Quads	Point	Count	1	48.0	178	85	93				
Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,297	25.0	2,459	615	1,844	759	165	6	1,844
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	1	46.6	310	145	165				
Sherman_Island	boatlaunch	Point	Count	3	100.0	300	300	0	9,936	0	0	34,985
	Commercial-Professional - Technical S	Point	Count	1	100.0	138	138	0				
	Commercial-Retail Trade	Point	Count	1	100.0	314	314	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,521	25.0	502	125	376				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	69,133	25.0	13,827	3,457	10,370				
	gas oil production fields	Point	Area	530	0.0	-	0	0				
	Gas oil wells	Point	Count	31	0.0	-	0	0				
	Hwy HAZUS_SDURS	Linear	Length (ft)	19,828	25.0	6,543	1,636	4,907				
	NG Pipelines	Linear	Length (ft)	65,495	0.0	12,444	0	12,444				
	NG Wells	Point	Count	3	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	26	100.0	885	885	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	42	42	0				
	Residential - Single Family Dwelling	Point	Count	21	100.0	3,039	3,039	0				
	transln_ca	Linear	Length (ft)	21,392	0.0	6,887	0	6,887				
Shima_Tract	Commercial-Entertainment and Recrea	Point	Count	2	22.0	2,321	511	1,810				
	Commercial-Medical - Office Clinic	Point	Count	1	20.0	662	132	530				
	Commercial-Personal and Repair Serv	Point	Count	3	28.0	1,596	447	1,149				
	Commercial-Professional - Technical S	Point	Count	1	44.0	9,544	4,199	5,345				
	Commercial-Retail Trade	Point	Count	1	30.0	1,828	548	1,280				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	106,480	25.0	21,296	5,324	15,972				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	hc ambulatory	Point	Count	8	16.0	-	0	0				
	hc hospitals	Point	Count	1	25.0	-	0	0				
	hc nursing res	Point	Count	2	15.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,769	25.0	1,904	476	1,428				
	Residential - Duplex	Point	Count	46	45.5	12,512	5,693	6,819				
	Residential - Institutional Dormitory	Point	Count	1	20.0	3,648	730	2,918				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	3	45.5	6,585	2,996	3,589				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	22	45.5	32,996	15,013	17,983				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	45.5	28,264	12,860	15,404				
	Residential - Single Family Dwelling	Point	Count	2,067	43.6	346,785	151,285	195,500				
	Residential - Triplex - Quads	Point	Count	58	45.5	17,000	7,735	9,265				
	Schools HAZUS SDURS	Point	Count	1	5.0	590	30	561				
	transln_ca	Linear	Length (ft)	19,639	0.0	4,835	0	4,835	208,479	263,652	5,753	22,235
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,785	25.0	757	189	568				
	Gas oil wells	Point	Count	4	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,257	25.0	1,405	351	1,054				
	transln_ca	Linear	Length (ft)	17,299	0.0	4,259	0	4,259	540	0	0	5,881
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Point	Count	1	37.0	141	52	89	52	89	2	0
SM-123	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,064	25.0	1,341	335	1,006				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,885	25.0	1,977	494	1,483				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,607	25.0	860	215	645				
	Intermodal terminal facilities	Point	Count	1	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	2,479	0.0	818	0	818				
	Petroleum Pipelines	Linear	Length (ft)	3,045	0.0	639	0	639				
	Rail 1000 nodes	Point	Count	1	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	3,085	25.0	879	220	659				
	Residential - Single Family Dwelling	Point	Count	12	37.0	1,525	564	961				
	Residential - Triplex - Quads	Point	Count	1	38.5	226	87	139				
	transln_ca	Linear	Length (ft)	5,315	0.0	1,309	0	1,309	3,916	7,100	166	6,559
SM-124	Commercial-Entertainment and Recre	Point	Count	4	14.0	5,451	763	4,688				
	Commercial-Personal and Repair Serv	Point	Count	3	16.0	4,608	737	3,871				
	Commercial-Professional - Technical S	Point	Count	1	28.0	10,077	2,822	7,255				
	Commercial-Retail Trade	Point	Count	1	18.0	6,688	1,204	5,484				
	Commercial-Wholesale Trade	Point	Count	1	13.0	1,717	223	1,494				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,486	25.0	2,800	700	2,100				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	49,676	25.0	9,935	2,484	7,451				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Government - General Services	Point	Count	2	14.0	2,535	355	2,180				
	hc ambulatory	Point	Count	4	12.0	-	0	0				
	hc nursing res	Point	Count	1	15.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,224	25.0	1,394	348	1,045				
	NG Pipelines	Linear	Length (ft)	4,077	0.0	775	0	775				
	Petroleum Pipelines	Linear	Length (ft)	38,776	0.0	8,143	0	8,143				
	Police Stations HAZUS SDURS	Point	Count	1	10.0	1,652	165	1,487				
	Rail 1000 nodes	Point	Count	4	0.0	-	0	0				
	Rail Facility HAZUS SDURS	Point	Count	1	25.0	2,572	643	1,929				
	Rail HAZUS SDURS	Linear	Length (ft)	29,822	25.0	8,499	2,125	6,375				
	Residential - Duplex	Point	Count	21	28.5	6,196	1,766	4,430				
	Residential - Manuf. Housing	Point	Count	54	100.0	1,876	1,876	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	28.5	2,196	626	1,570				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	1	28.5	5,033	1,434	3,599				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	28.5	5,809	1,656	4,153				
	Residential - Single Family Dwelling	Point	Count	536	29.3	92,605	27,087	65,518				
	Residential - Triplex - Quads	Point	Count	37	28.5	10,750	3,064	7,686				
	Schools HAZUS SDURS	Point	Count	3	9.0	1,770	159	1,611				
	sewage treat	Point	Count	2	30.0	175,000	52,500	0				

	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	13,589	0.0	3,346	0	3,346	103,487	119,205	2,100	29,235
SM-132	Gas_oil_wells	Point	Count	1	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	1	43.6	175	76	99	76	99	8	0
SM-133	gas_oil_production_fields	Point	Area	203	0.0	-	0	0				
	Gas_oil_wells	Point	Count	9	0.0	-	0	0	0	0	0	0
SM-134	gas_oil_production_fields	Point	Area	1	0.0	-	0	0				
	Gas_oil_wells	Point	Count	1	0.0	-	0	0	0	0	0	0
SM-198	Commercial-Retail Trade	Point	Count	1	34.0	1	0	1				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	3,875	25.0	775	194	581				
	Gas_oil_wells	Point	Count	3	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	4,379	0.0	832	0	832				
	Petroleum Pipelines	Linear	Length (ft)	5,484	0.0	1,152	0	1,152				
	Rail_HAZUS_SDURS	Linear	Length (ft)	1,008	25.0	287	72	215				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	48.0	19	9	10				
	Residential - Single Family Dwelling	Point	Count	5	46.6	809	377	432	652	442	7	2,780
SM-199	Communication_HAZUS_SDURS	Point	Count	1	100.0	118	118	0				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	3,987	25.0	797	199	598				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	45.5	10	5	5				
	Residential - Single Family Dwelling	Point	Count	2	43.6	450	196	254	518	259	161	598
SM-202	Residential - Single Family Dwelling	Point	Count	1	39.1	165	65	100	65	100	6	0
SM-39	Commercial-Professional - Technical S	Point	Count	1	28.0	46	13	33				
	Commercial-Retail Trade	Point	Count	1	18.0	127	23	104				
	Delta_Roads_PBSJ_Major_Roads	Linear	Length (ft)	4,675	25.0	1,543	386	1,157				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	13,304	25.0	2,661	665	1,996				
	Hwy_Bridge_HAZUS_SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Rail_HAZUS_SDURS	Linear	Length (ft)	3,726	25.0	1,062	266	797				
	Residential - Single Family Dwelling	Point	Count	6	29.3	1,159	339	820				
	transln_ca	Linear	Length (ft)	13,355	0.0	3,288	0	3,288	3,191	5,457	269	7,237
SM-40	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	7,779	25.0	1,556	389	1,167	389	0	0	1,167
SM-41	Commercial-Professional - Technical S	Point	Count	1	38.0	2	1	1				
	Commercial-Retail Trade	Point	Count	1	23.0	36	8	28				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	373	25.0	75	19	56				
	Petroleum Pipelines	Linear	Length (ft)	10,066	0.0	2,114	0	2,114				
	Rail_HAZUS_SDURS	Linear	Length (ft)	5,568	25.0	1,587	397	1,190	424	29	16	3,360
SM-42	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	3,060	0.0	753	0	753	250	750	366	753
SM-43	gas_oil_production_fields	Point	Area	80	0.0	-	0	0				
	Gas_oil_wells	Point	Count	4	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	1	37.0	168	62	106	62	106	8	0
SM-44	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	11,682	25.0	2,336	584	1,752				
	Residential - Single Family Dwelling	Point	Count	7	32.6	1,364	445	919				
	transln_ca	Linear	Length (ft)	5,355	0.0	1,318	0	1,318	1,029	919	101	3,071
SM-46	Commercial-Retail Trade	Point	Count	1	26.0	3	1	2				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	2,339	25.0	468	117	351	118	2	0	351
SM-47	solid_waste_facilities	Point	Count	1	25.0	-	0	0	0	0	0	0
SM-48	Commercial-Entertainment and Recrea	Point	Count	1	18.0	720	130	590				
	Commercial-Professional - Technical S	Point	Count	1	38.0	839	319	520				
	Commercial-Retail Trade	Point	Count	2	23.0	14,924	3,433	11,491				
	Gas_oil_wells	Point	Count	2	0.0	-	0	0				
	Petroleum Pipelines	Linear	Length (ft)	20,675	0.0	4,342	0	4,342				
	Rail_HAZUS_SDURS	Linear	Length (ft)	9,922	25.0	2,828	707	2,121	4,588	12,602	286	6,463
SM-49	Commercial-Entertainment and Recrea	Point	Count	1	18.0	884	159	725				
	Commercial-Professional - Technical S	Point	Count	1	38.0	3,605	1,370	2,235				
	Commercial-Retail Trade	Point	Count	1	23.0	3,942	907	3,035				
	Commercial-Wholesale Trade	Point	Count	2	19.0	3,603	685	2,918				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	17,086	25.0	3,417	854	2,563				
	Hwy_HAZUS_SDURS	Linear	Length (ft)	3,040	25.0	1,003	251	752				
	Industrial - Light	Point	Count	1	30.0	2,036	611	1,425				
	Petroleum Pipelines	Linear	Length (ft)	19,582	0.0	4,112	0	4,112				
	Rail_HAZUS_SDURS	Linear	Length (ft)	9,851	25.0	2,808	702	2,106				

	Residential - Single Family Dwelling	Point	Count	8	37.0	1,694	627	1,067	6,165	11,406	315	9,533
SM-51	gas_oil_production_fields	Point	Area	2	0.0	-	0	0	0	0	0	0
SM-52	Commercial-Retail Trade	Point	Count	1	20.0	61	12	49				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,653	25.0	1,531	383	1,148				
	gas_oil_production_fields	Point	Area	188	0.0	-	0	0				
	Gas_oil_wells	Point	Count	8	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	686	25.0	226	57	170				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	32.0	3	1	2				
	Residential - Single Family Dwelling	Point	Count	3	32.6	458	149	309	1,102	1,859	95	1,318
SM-53	Commercial-Retail Trade	Point	Count	1	16.0	28	4	24				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	53	25.0	11	3	8				
	gas_oil_production_fields	Point	Area	177	0.0	-	0	0				
	Gas_oil_wells	Point	Count	3	0.0	-	0	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	25.5	1	0	1	7	24	6	8
SM-54	Commercial-Personal and Repair Serv	Point	Count	2	19.0	2,712	515	2,197				
	Commercial-Professional - Technical S	Point	Count	1	35.0	5,465	1,913	3,552				
	Commercial-Retail Trade	Point	Count	1	20.0	5,288	1,058	4,230				
	Commercial-Wholesale Trade	Point	Count	5	16.0	12,290	1,966	10,324				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,186	25.0	1,051	263	789				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,042	25.0	4,808	1,202	3,606				
	Gas_oil_wells	Point	Count	1	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,346	25.0	774	194	581				
	Industrial - Construction	Point	Count	1	47.0	4,275	2,009	2,266				
	Industrial - Heavy	Point	Count	3	22.0	10,740	2,363	8,377				
	NG Pipelines	Linear	Length (ft)	460	0.0	87	0	87				
	Petroleum Pipelines	Linear	Length (ft)	25,987	0.0	5,457	0	5,457				
	Rail 1000 nodes	Point	Count	4	0.0	-	0	0				
	Rail Facility HAZUS SDURS	Point	Count	1	0.0	2,572	0	2,572				
	Rail HAZUS SDURS	Linear	Length (ft)	38,417	25.0	10,949	2,737	8,212				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	32.0	2	1	1				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	32.0	9	3	6				
	Residential - Single Family Dwelling	Point	Count	8	32.6	1,719	561	1,158				
	solid_waste_facilities	Point	Count	1	25.0	-	0	0	16,284	39,184	809	18,732
SM-55	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,381	25.0	2,876	719	2,157				
	NG Pipelines	Linear	Length (ft)	4,432	0.0	842	0	842				
	Petroleum Pipelines	Linear	Length (ft)	4,260	0.0	895	0	895				
	Residential - Single Family Dwelling	Point	Count	2	46.6	353	165	188	884	188	5	3,894
SM-56	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,417	25.0	1,083	271	812				
	Gas_oil_wells	Point	Count	2	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	4,637	0.0	881	0	881				
	Petroleum Pipelines	Linear	Length (ft)	3,100	0.0	651	0	651				
	Residential - Single Family Dwelling	Point	Count	3	37.0	577	213	364	484	364	6	2,345
SM-57	bridges_not_in_HAZUS	Point	Count	1	25.0	1,000	250	750				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	36	25.0	12	3	9				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,872	25.0	1,974	494	1,481				
	hsc_ambulatory	Point	Count	2	11.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,242	25.0	740	185	555				
	NG Pipelines	Linear	Length (ft)	5,915	0.0	1,124	0	1,124				
	Residential - Single Family Dwelling	Point	Count	19	29.3	4,243	1,241	3,002				
	solid_waste_facilities	Point	Count	1	25.0	-	0	0				
	transln_ca	Linear	Length (ft)	11,665	0.0	2,872	0	2,872				
	water_trans	Point	Count	1	0.0	-	0	0	2,673	5,252	141	6,041
SM-58	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,840	25.0	768	192	576	192	0	0	576
SM-59	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	291	25.0	58	15	44				
	gas_oil_production_fields	Point	Area	204	0.0	-	0	0				
	Gas_oil_wells	Point	Count	6	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,382	25.0	1,446	362	1,085				
	Residential - Single Family Dwelling	Point	Count	1	29.3	163	48	115	424	115	4	1,128
SM-60	Commercial-Entertainment and Recrea	Point	Count	1	12.0	1,181	142	1,039				

SM-84	Commercial-Personal and Repair Serv	Point	Count	1	13.0	400	52	348	1,431	4,903	210	601
	Commercial-Professional - Technical S	Point	Count	1	22.0	1,668	367	1,301				
	Commercial-Retail Trade	Point	Count	1	16.0	595	95	500				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,004	25.0	801	200	601				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Residential - Single Family Dwelling	Point	Count	2	25.8	290	75	215				
	Commercial-Retail Trade	Point	Count	1	30.0	78	23	55				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	40,711	25.0	8,142	2,036	6,107				
	gas oil production fields	Point	Area	9	0.0	-	0	0				
SM-85-Grizzly_Island	Gas oil wells	Point	Count	4	0.0	-	0	0	2,659	830	9	6,107
	Residential - Single Family Dwelling	Point	Count	7	43.6	1,375	600	775				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,407	25.0	8,481	2,120	6,361				
	gas oil production fields	Point	Area	188	0.0	-	0	0				
	Gas oil wells	Point	Count	11	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	28,157	0.0	5,350	0	5,350				
	Petroleum Pipelines	Linear	Length (ft)	2,326	0.0	488	0	488				
	Residential - Single Family Dwelling	Point	Count	4	39.1	910	356	554				
	Commercial-Entertainment and Recrea	Point	Count	4	14.0	2,885	404	2,481				
	Commercial-Personal and Repair Serv	Point	Count	2	16.0	2,505	401	2,104				
Smith_Tract	Commercial-Professional - Technical S	Point	Count	1	28.0	2,354	659	1,695	185,596	434,795	18,268	27,622
	Commercial-Retail Trade	Point	Count	1	18.0	3,782	681	3,101				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	11,770	25.0	3,884	971	2,913				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	157,829	25.0	31,566	7,891	23,674				
	hc ambulatory	Point	Count	4	13.0	-	0	0				
	hc nursing res	Point	Count	1	20.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	5	25.0	10,000	2,500	7,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,180	25.0	1,380	345	1,035				
	Religion - Churches and Other Non-pr	Point	Count	1	12.0	1,680	202	1,478				
	Residential - Duplex	Point	Count	29	28.5	7,938	2,262	5,676				
	Residential - Manuf. Housing	Point	Count	14	100.0	527	527	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	3	28.5	7,943	2,264	5,679				
	Residential - Multi-Dwellings - 20 to 49	Point	Count	1	28.5	15,653	4,461	11,192				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	3	28.5	7,256	2,068	5,188				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	3	28.5	32,439	9,245	23,194				
	Residential - Single Family Dwelling	Point	Count	3,058	29.3	509,613	149,062	360,551				
	Residential - Triplex - Quads	Point	Count	10	28.5	5,428	1,547	3,881				
	Schools HAZUS SDURS	Point	Count	2	9.0	1,180	106	1,074				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	280	25.0	56	14	42				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
Stark_Tract	NG Pipelines	Linear	Length (ft)	4,943	0.0	939	0	939	159	187	12	4,462
	Residential - Single Family Dwelling	Point	Count	2	43.6	332	145	187				
	transln ca	Linear	Length (ft)	14,136	0.0	3,480	0	3,480				
	Commercial-Retail Trade	Point	Count	1	100.0	123	123	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,422	25.0	1,459	365	1,094				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	16,055	25.0	3,211	803	2,408				
	gas oil production fields	Point	Area	1,092	0.0	-	0	0				
	Gas oil wells	Point	Count	20	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	14,653	0.0	3,810	0	3,810				
	NG Wells	Point	Count	3	0.0	-	0	0				
Staten_Island	Residential - Manuf. Housing	Point	Count	4	100.0	122	122	0	1,605	0	0	7,313
	Residential - Single Family Dwelling	Point	Count	2	100.0	192	192	0				
	Commercial-Professional - Technical S	Point	Count	1	41.0	143	59	84				
	Commercial-Retail Trade	Point	Count	1	26.0	486	126	360				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	29,052	25.0	5,810	1,453	4,358				
	Gas oil wells	Point	Count	4	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,512	25.0	1,489	372	1,117				
	Rail HAZUS SDURS	Linear	Length (ft)	4,671	25.0	1,331	333	998				
	Residential - Manuf. Housing	Point	Count	10	100.0	374	374	0				
Stewart_Tract	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	43.0	121	52	69				
	Residential - Single Family Dwelling	Point	Count	49	39.1	8,518	3,333	5,185				

	transln_ca	Linear	Length (ft)	20,855	0.0	5,135	0	5,135	7,601	10,198	150	11,608
Sutter Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,515	25.0	1,160	290	870				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	61,390	25.0	12,278	3,069	9,208				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,145	25.0	1,698	424	1,273				
	Residential - Manuf. Housing	Point	Count	2	100.0	35	35	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	299	299	0				
	Residential - Multi-Dwellings - 50+ units	Point	Count	1	100.0	79	79	0				
	Residential - Single Family Dwelling	Point	Count	33	100.0	6,013	6,013	0	10,210	0	0	11,352
Terminous_Tract 1	Commercial-Professional - Technical S	Point	Count	1	35.0	2	1	1				
	Commercial-Retail Trade	Point	Count	1	20.0	8	2	6				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,547	25.0	511	128	383				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,059	25.0	1,212	303	909				
	gas oil production fields	Point	Area	27	0.0	-	0	0				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,274	25.0	1,411	353	1,058				
	NG Pipelines	Linear	Length (ft)	651	0.0	150	0	150				
	Residential - Manuf. Housing	Point	Count	6	100.0	221	221	0				
	Residential - Single Family Dwelling	Point	Count	2	32.6	355	116	239				
	Schools HAZUS SDURS	Point	Count	1	9.0	590	53	537				
	transln_ca	Linear	Length (ft)	8,056	0.0	1,984	0	1,984	1,675	2,284	84	4,483
Terminous_Tract 2	Agriculture	Point	Count	1	100.0	953	953	0				
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	72	72	0				
	Commercial-Retail Trade	Point	Count	1	100.0	354	354	0				
	Commercial-Wholesale Trade	Point	Count	1	100.0	1,610	1,610	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,780	25.0	917	229	688				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	57,147	25.0	11,429	2,857	8,572				
	gas oil production fields	Point	Area	303	0.0	-	0	0				
	Gas oil wells	Point	Count	9	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,771	25.0	1,574	394	1,181				
	NG Wells	Point	Count	1	0.0	-	0	0				
	Residential - Duplex	Point	Count	1	100.0	362	362	0				
	Residential - Manuf. Housing	Point	Count	121	100.0	4,125	4,125	0				
	Residential - Single Family Dwelling	Point	Count	48	100.0	6,491	6,491	0				
	US Cell Towers	Point	Count	1	0.0	250	0	250	18,047	1,750	19	10,441
Terminous_Tract 3	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	251	25.0	50	13	38				
	Residential - Manuf. Housing	Point	Count	7	100.0	230	230	0				
	Residential - Single Family Dwelling	Point	Count	3	46.6	363	169	194	412	194	96	38
Twitchell_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	19,768	25.0	3,954	988	2,965				
	gas oil production fields	Point	Area	1,407	0.0	-	0	0				
	Gas oil wells	Point	Count	22	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	6,373	0.0	1,466	0	1,466				
	NG Wells	Point	Count	9	0.0	-	0	0				
	Residential - Duplex	Point	Count	1	100.0	182	182	0				
	Residential - Manuf. Housing	Point	Count	19	100.0	663	663	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	32	32	0				
	Residential - Single Family Dwelling	Point	Count	17	100.0	2,273	2,273	0				
	Residential - Triplex - Quads	Point	Count	1	100.0	135	135	0	4,273	0	0	4,431
Tyler_Island 2	airport points	Point	Count	1	25.0	-	0	0				
	Airports HAZUS SDURS	Point	Count	1	25.0	6,431	1,608	4,823				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,160	25.0	1,703	426	1,277				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	132,666	25.0	26,533	6,633	19,900				
	gas oil production fields	Point	Area	2,107	0.0	-	0	0				
	Gas oil wells	Point	Count	45	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	14,527	0.0	3,051	0	3,051				
	NG Wells	Point	Count	4	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	106	106	0				
	Residential - Single Family Dwelling	Point	Count	13	100.0	2,321	2,321	0				

	Runway HAZUS SDURS	Point	Count	1	25.0	36,674	9,169	27,506				
	solid waste facilities	Point	Count	1	25.0	-	0	0	20,762	33,829	309	24,227
Union_Island 1	Dams HAZUS SDURS	Point	Count	1	0.0	-	0	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,456	25.0	2,131	533	1,598				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	113,774	25.0	22,755	5,689	17,066				
	gas oil production fields	Point	Area	226	0.0	-	0	0				
	Gas oil wells	Point	Count	13	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	17,354	0.0	3,297	0	3,297				
	NG Wells	Point	Count	4	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	5	100.0	162	162	0				
	Residential - Single Family Dwelling	Point	Count	25	100.0	3,919	3,919	0				
	transln ca	Linear	Length (ft)	29,470	0.0	7,256	0	7,256	10,302	0	0	29,217
Union_Island 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	415	25.0	83	21	62				
	gas oil production fields	Point	Area	0	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	2,582	0.0	491	0	491	21	0	0	553
Union_Island 3	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,733	25.0	947	237	710				
	Gas oil wells	Point	Count	4	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	6,943	0.0	1,319	0	1,319				
	Residential - Single Family Dwelling	Point	Count	2	43.6	347	151	196				
	transln ca	Linear	Length (ft)	14,549	0.0	3,582	0	3,582	388	196	12	5,611
Union_Island 4	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,456	25.0	491	123	368				
	gas oil production fields	Point	Area	69	0.0	-	0	0				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	1,028	0.0	195	0	195	123	0	0	564
Upper_Roberts_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	66,021	25.0	13,204	3,301	9,903				
	gas oil production fields	Point	Area	849	0.0	-	0	0				
	Gas oil wells	Point	Count	23	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Nat Gas HAZUS SDURS	Point	Count	1	0.0	1,286	0	1,286				
	NG Pipelines	Linear	Length (ft)	13,506	0.0	2,566	0	2,566				
	NG Wells	Point	Count	17	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	3	100.0	83	83	0				
	Residential - Single Family Dwelling	Point	Count	25	32.6	4,303	1,404	2,899				
	transln ca	Linear	Length (ft)	27,814	0.0	6,848	0	6,848	5,288	5,685	72	19,317
	gas oil production fields	Point	Area	148	0.0	-	0	0				
Van_Sickle_Island	Gas oil wells	Point	Count	6	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	2	43.6	391	171	220				
	sewage treat	Point	Count	1	30.0	100,000	30,000	0	30,171	220	6	0
Veale_Tract 1	Commercial-Professional - Technical S	Point	Count	1	47.0	156	73	83				
	Commercial-Retail Trade	Point	Count	1	34.0	49	17	32				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,068	25.0	414	103	310				
	gas oil production fields	Point	Area	85	0.0	-	0	0				
	Gas oil wells	Point	Count	4	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	4	100.0	151	151	0				
	Residential - Single Family Dwelling	Point	Count	25	46.6	5,251	2,448	2,803				
	transln ca	Linear	Length (ft)	14,589	0.0	4,697	0	4,697	2,793	2,918	115	5,008
Veale_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	118	25.0	24	6	18				
	NG Pipelines	Linear	Length (ft)	7	0.0	1	0	1				
	Residential - Institutional Dormitory	Point	Count	1	16.0	3,585	574	3,011				
	Residential - Single Family Dwelling	Point	Count	2	37.0	424	157	267	736	3,279	564	19
Venice_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	62,979	25.0	12,596	3,149	9,447				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	2	100.0	30	30	0	3,179	0	0	9,447
Victoria_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	66,424	25.0	13,285	3,321	9,964				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,687	25.0	1,877	469	1,408				
	NG Pipelines	Linear	Length (ft)	9,170	0.0	1,742	0	1,742				
	Residential - Institutional Dormitory	Point	Count	2	100.0	8,025	8,025	0				
	Residential - Manuf. Housing	Point	Count	1	100.0	25	25	0				
	Residential - Single Family Dwelling	Point	Count	3	100.0	764	764	0				
	transln ca	Linear	Length (ft)	9,614	0.0	3,095	0	3,095	12,604	0	0	16,209
Walnut_Grove	Commercial-Professional - Technical S	Point	Count	1	100.0	277	277	0				
	Commercial-Retail Trade	Point	Count	1	47.0	144	68	76				

	Communication HAZUS SDURS	Point	Count	3	100.0	354	354	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,282	25.0	1,083	271	812				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	23,843	25.0	4,769	1,192	3,576				
	gas oil production fields	Point	Area	279	0.0	-	0	0				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	hc ambulatory	Point	Count	1	13.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Residential - Duplex	Point	Count	14	100.0	3,953	3,953	0				
	Residential - Manuf. Housing	Point	Count	7	100.0	277	277	0				
	Residential - Single Family Dwelling	Point	Count	141	100.0	25,169	25,169	0	32,561	3,076	294	4,389
Walthal_Tract	Commercial-Retail Trade	Point	Count	1	30.0	32	10	22				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,330	25.0	1,759	440	1,319				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	22,223	25.0	4,445	1,111	3,333				
	gas oil production fields	Point	Area	409	0.0	-	0	0				
	Gas oil wells	Point	Count	9	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	2,032	0.0	660	0	660				
	NG Wells	Point	Count	2	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	27	100.0	986	986	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	45.5	43	20	23				
	Residential - Single Family Dwelling	Point	Count	103	43.6	18,049	7,874	10,175				
	transln_ca	Linear	Length (ft)	3,991	0.0	983	0	983	10,940	11,721	274	6,296
Water Canal	gas oil production fields	Point	Area	1	0.0	-	0	0	0	0	#VALUE!	0
Water Zone 1	Commercial-Entertainment and Recrea	Point	Count	1	33.0	1,187	392	795				
	Commercial-Professional - Technical S	Point	Count	1	100.0	1,824	1,824	0				
	Commercial-Retail Trade	Point	Count	1	42.0	689	289	400				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,425	25.0	1,130	283	848				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,217	25.0	4,843	1,211	3,633				
	gas oil production fields	Point	Area	86	0.0	-	0	0				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	20,349	25.0	6,715	1,679	5,036				
	NG Pipelines	Linear	Length (ft)	545	0.0	153	0	153				
	Petroleum Pipelines	Linear	Length (ft)	138	0.0	29	0	29				
	Rail HAZUS SDURS	Linear	Length (ft)	25	25.0	7	2	5				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	64	64	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	255	255	0				
	Residential - Single Family Dwelling	Point	Count	29	100.0	6,366	6,366	0				
	transln_ca	Linear	Length (ft)	406	0.0	100	0	100	12,364	1,195	#VALUE!	9,804
Water Zone 2	Commercial-Professional - Technical S	Point	Count	1	44.0	5	2	3				
	Commercial-Retail Trade	Point	Count	1	30.0	2	1	1				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	0	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15	25.0	3	1	2				
	gas oil production fields	Point	Area	35	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	0	25.0	0	0	0				
	transln_ca	Linear	Length (ft)	1	0.0	0	0	0	4	4	#VALUE!	2
Water Zone 3	Delta Roads PBSJ Major Roads	Linear	Length (ft)	0	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1	25.0	0	0	0				
	gas oil production fields	Point	Area	128	0.0	-	0	0				
	transln_ca	Linear	Length (ft)	0	0.0	0	0	0	0	0	#VALUE!	0
Water Zone 4	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	55	25.0	11	3	8				
	gas oil production fields	Point	Area	4	0.0	-	0	0				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	0	0.0	0	0	10,000				
	transln_ca	Linear	Length (ft)	0	0.0	0	0	0	3	0	#VALUE!	8
Water Zone 5	Delta Roads PBSJ Major Roads	Linear	Length (ft)	0	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	0	25.0	0	0	0				
	gas oil production fields	Point	Area	3	0.0	-	0	0				
	transln_ca	Linear	Length (ft)	0	0.0	0	0	0	0	0	#VALUE!	0
Webb_Tract	gas oil production fields	Point	Area	82	0.0	-	0	0				
	Gas oil wells	Point	Count	10	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	1,291	0.0	245	0	245				
	NG Wells	Point	Count	1	0.0	-	0	0	0	0	0	245
West Sacramento North	Agriculture	Point	Count	1	100.0	2,769	2,769	0				

airport_points	Point	Count	2	25.0	-	0	0
boatlaunch	Point	Count	1	100.0	100	100	0
bridges not in HAZUS	Point	Count	4	25.0	4,000	1,000	3,000
Commercial-Entertainment and Recrea	Point	Count	5	41.0	3,670	1,505	2,165
Commercial-Medical - Office Clinic	Point	Count	1	34.0	1,687	574	1,113
Commercial-Personal and Repair Serv	Point	Count	5	47.0	7,576	3,561	4,015
Commercial-Professional - Technical S	Point	Count	2	100.0	34,771	34,771	0
Commercial-Retail Trade	Point	Count	1	100.0	18,204	18,204	0
Commercial-Wholesale Trade	Point	Count	36	45.0	81,018	36,458	44,560
Delta Roads PBSJ Major Roads	Linear	Length (ft)	43,306	25.0	14,291	3,573	10,718
Delta Roads PBSJ Minor Roads	Linear	Length (ft)	184,628	25.0	36,926	9,231	27,694
Government - General Services	Point	Count	1	44.0	808	356	452
Hazmat HAZUS SDURS	Point	Count	15	0.0	-	0	0
hc ambulatory	Point	Count	8	27.0	-	0	0
hc hospitals	Point	Count	1	100.0	-	0	0
hc nursing res	Point	Count	1	38.0	-	0	0
Hwy Bridge HAZUS SDURS	Point	Count	5	25.0	10,000	2,500	7,500
Hwy HAZUS SDURS	Linear	Length (ft)	18,423	25.0	6,080	1,520	4,560
Industrial - Construction	Point	Count	3	100.0	5,306	5,306	0
Industrial - Food - Drugs - Chemical	Point	Count	5	42.0	28,603	12,013	16,590
Industrial - Heavy	Point	Count	4	100.0	12,498	12,498	0
Industrial - Light	Point	Count	3	48.0	6,307	3,027	3,280
Intermodal terminal facilities	Point	Count	3	0.0	-	0	0
NG Pipelines	Linear	Length (ft)	10,883	0.0	2,829	0	2,829
Petroleum Pipelines	Linear	Length (ft)	29,059	0.0	6,102	0	6,102
pipeline trans	Point	Count	1	0.0	-	0	0
Port HAZUS SDURS	Point	Count	3	0.0	7,717	0	7,717
Rail 1000 nodes	Point	Count	12	0.0	-	0	0
Rail Bridge HAZUS SDURS	Point	Count	3	25.0	3,000	750	2,250
Rail Facility HAZUS SDURS	Point	Count	4	100.0	10,290	10,290	0
Rail HAZUS SDURS	Linear	Length (ft)	47,822	25.0	13,629	3,407	10,222
Religion - Churches and Other Non-pro	Point	Count	3	30.0	3,595	1,079	2,517
Residential - Duplex	Point	Count	54	100.0	14,693	14,693	0
Residential - Institutional Dormitory	Point	Count	1	38.0	3,495	1,328	2,167
Residential - Manuf. Housing	Point	Count	398	100.0	13,607	13,607	0
Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	10,471	10,471	0
Residential - Multi-Dwellings - 5 to 9 un	Point	Count	1	100.0	12,593	12,593	0
Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	17,266	17,266	0
Residential - Single Family Dwelling	Point	Count	1,412	100.0	193,826	193,826	0
Residential - Triplex - Quads	Point	Count	29	100.0	9,259	9,259	0
sewage treat	Point	Count	1	30.0	100,000	30,000	0
solid waste facilities	Point	Count	3	25.0	-	0	0
TankFarms	Point	Count	2	0.0	6,000	0	6,000
transln ca	Linear	Length (ft)	33,024	0.0	8,131	0	8,131
Waste Water HAZUS SDURS	Point	Count	2	0.0	157,176	0	47,153
water trans	Point	Count	3	0.0	-	0	0
bridges not in HAZUS	Point	Count	1	25.0	1,000	250	750
Commercial-Professional - Technical S	Point	Count	1	100.0	1,453	1,453	0
Commercial-Retail Trade	Point	Count	1	100.0	417	417	0
Commercial-Wholesale Trade	Point	Count	1	49.0	3,050	1,495	1,555
Communication HAZUS SDURS	Point	Count	2	100.0	236	236	0
Delta Roads PBSJ Major Roads	Linear	Length (ft)	26,956	25.0	8,895	2,224	6,672
Delta Roads PBSJ Minor Roads	Linear	Length (ft)	48,221	25.0	9,644	2,411	7,233
gas oil production fields	Point	Area	80	0.0	-	0	0
Gas oil wells	Point	Count	10	0.0	-	0	0
Hwy HAZUS SDURS	Linear	Length (ft)	5,245	25.0	1,731	433	1,298
Petroleum Pipelines	Linear	Length (ft)	12,899	0.0	2,709	0	2,709
Rail Bridge HAZUS SDURS	Point	Count	1	25.0	1,000	250	750
Rail HAZUS SDURS	Linear	Length (ft)	4,774	25.0	1,361	340	1,020
Residential - Manuf. Housing	Point	Count	4	100.0	178	178	0
Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	1	1	0
Residential - Single Family Dwelling	Point	Count	342	100.0	65,277	65,277	0

West Sacramento South 1

467,534

150,479

2,261

70,257

	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	7,712	0.0	1,899	0	1,899				
	US_Cell_Towers	Point	Count	2	0.0	500	0	500	75,214	4,306	66	20,831
West Sacramento South 2	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,073	25.0	1,014	254	761				
	Petroleum Pipelines	Linear	Length (ft)	2,537	0.0	533	0	533	254	0	0	1,293
Woodward_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,139	25.0	5,628	1,407	4,221				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	7,820	0.0	1,642	0	11,642				
	mokelumne aqueduct pipe	Linear	Length (ft)	23,350	0.0	116,749	8,873	0	10,280	0	0	5,863
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,701	25.0	1,940	485	1,455				
	Gas oil wells	Point	Count	2	0.0	-	0	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	54	54	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	43	43	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	836	836	0				
	transln_ca	Linear	Length (ft)	32,244	0.0	7,939	0	7,939	1,418	0	0	9,394
Yolo_Bypass	Commercial-Personal and Repair Serv	Point	Count	2	35.0	2,238	783	1,455				
	Commercial-Professional - Technical S	Point	Count	1	100.0	4,617	4,617	0				
	Commercial-Retail Trade	Point	Count	1	38.0	1,885	716	1,169				
	Commercial-Wholesale Trade	Point	Count	4	32.0	10,151	3,248	6,903				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	488	25.0	161	40	121				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	55,721	25.0	11,144	2,786	8,358				
	gas oil production fields	Point	Area	906	0.0	-	0	0				
	Gas oil wells	Point	Count	37	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,232	25.0	1,397	349	1,048				
	NG Pipelines	Linear	Length (ft)	31,731	0.0	6,029	0	6,029				
	Petroleum Pipelines	Linear	Length (ft)	9,808	0.0	2,060	0	2,060				
	Rail HAZUS SDURS	Linear	Length (ft)	8,045	25.0	2,293	573	1,720				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	49.5	6	3	3				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	49.5	17	8	9				
	Residential - Single Family Dwelling	Point	Count	1	48.6	317	154	163				
	transln_ca	Linear	Length (ft)	32,873	0.0	8,094	0	8,094	13,779	11,201	61	27,429
Zone 120	Commercial-Retail Trade	Point	Count	1	26.0	177	46	131				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	12,876	25.0	4,249	1,062	3,187				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,822	25.0	4,964	1,241	3,723				
	gas oil production fields	Point	Area	750	0.0	-	0	0				
	Gas oil wells	Point	Count	19	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	6,993	0.0	2,273	0	2,273				
	NG Wells	Point	Count	6	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	9	100.0	354	354	0				
	Residential - Single Family Dwelling	Point	Count	40	39.1	7,119	2,785	4,334				
	transln_ca	Linear	Length (ft)	7,868	0.0	1,937	0	1,937	5,489	4,465	78	11,120
Zone 122	Residential - Single Family Dwelling	Point	Count	1	100.0	125	125	0	125	0	0	0
Zone 14	Gas oil wells	Point	Count	2	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	2,272	0.0	432	0	432	0	0	0	432
Zone 148	Commercial-Retail Trade	Point	Count	1	42.0	53	22	31				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	354	25.0	117	29	88				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,957	25.0	3,191	798	2,393				
	Gas oil wells	Point	Count	5	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	9,686	25.0	3,196	799	2,397				
	Residential - Manuf. Housing	Point	Count	7	100.0	245	245	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	124	124	0				
	Residential - Single Family Dwelling	Point	Count	28	100.0	3,692	3,692	0				
	Schools HAZUS SDURS	Point	Count	1	24.0	590	142	448				
	transln_ca	Linear	Length (ft)	5,058	0.0	1,245	0	1,245	5,851	479	11	6,124
Zone 155	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	542	25.0	108	27	81				
	transln_ca	Linear	Length (ft)	769	0.0	189	0	189	27	0	0	271
Zone 158 (Smith Tract_2)	boatlaunch	Point	Count	1	0.0	100	0	100				
	Commercial-Personal and Repair Serv	Point	Count	2	12.0	2,737	328	2,409				
	Commercial-Professional - Technical S	Point	Count	1	16.0	2,652	424	2,228				
	Commercial-Retail Trade	Point	Count	1	14.0	4,322	605	3,717				
	Commercial-Wholesale Trade	Point	Count	1	8.0	3,830	306	3,524				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,756	25.0	2,230	557	1,672				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	91,854	25.0	18,371	4,593	13,778				
	Hazmat HAZUS SDURS	Point	Count	8	0.0	-	0	0				
	hc ambulatory	Point	Count	2	11.0	-	0	0				
	hc nursing res	Point	Count	1	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	9	25.0	18,000	4,500	13,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	7,665	25.0	2,530	632	1,897				
	Residential - Duplex	Point	Count	44	22.5	12,596	2,834	9,762				
	Residential - Manuf. Housing	Point	Count	25	100.0	829	829	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	22.5	50	11	39				
	Residential - Single Family Dwelling	Point	Count	1,295	20.8	179,718	37,291	142,427				
	Residential - Triplex - Quads	Point	Count	53	22.5	15,983	3,596	12,387				
	Schools HAZUS SDURS	Point	Count	1	7.0	590	41	549				
	Utilities	Point	Count	1	0.0	-	0	0	56,550	190,639	19,807	17,347
Zone 160	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,297	25.0	1,859	465	1,395				
	Residential - Single Family Dwelling	Point	Count	71	32.6	9,269	3,024	6,245	3,489	6,245	1,243	1,395
Zone 162	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,168	25.0	834	208	625				
	NG Pipelines	Linear	Length (ft)	2,641	0.0	502	0	502				
	Residential - Manuf. Housing	Point	Count	1	100.0	42	42	0				
	Residential - Single Family Dwelling	Point	Count	10	43.6	2,138	933	1,205	1,183	1,205	81	1,127
Zone 171	Commercial-Retail Trade	Point	Count	1	18.0	35	6	29				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,865	25.0	2,265	566	1,699				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,990	25.0	798	199	598				
	gas oil production fields	Point	Area	789	0.0	-	0	0				
	Gas oil wells	Point	Count	14	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,348	25.0	1,435	359	1,076				
	NG Pipelines	Linear	Length (ft)	15,490	0.0	5,034	0	5,034				
	Rail HAZUS SDURS	Linear	Length (ft)	4,827	25.0	1,376	344	1,032				
	Residential - Single Family Dwelling	Point	Count	3	29.3	514	150	364	3,125	4,892	89	9,440
Zone 185	Commercial-Personal and Repair Serv	Point	Count	1	13.0	1,409	183	1,226				
	Commercial-Professional - Technical S	Point	Count	1	22.0	4,243	933	3,310				
	Commercial-Retail Trade	Point	Count	1	16.0	715	114	601				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	100,662	25.0	20,132	5,033	15,099				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	hc nursing res	Point	Count	4	16.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,862	25.0	1,275	319	958				
	Residential - Duplex	Point	Count	43	25.5	10,969	2,797	8,172				
	Residential - Institutional Dormitory	Point	Count	5	14.0	23,034	3,225	19,809				
	Residential - Manuf. Housing	Point	Count	10	100.0	316	316	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	25.5	532	136	396				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	25.5	16,268	4,148	12,120				
	Residential - Single Family Dwelling	Point	Count	2,234	25.8	427,503	110,082	317,421				
	Residential - Triplex - Quads	Point	Count	7	25.5	2,573	656	1,917				
	Residential - Nursing Home	Point	Count	2	14.0	5,740	804	4,936				
	Schools HAZUS SDURS	Point	Count	1	11.0	590	65	525	130,311	374,932	28,635	16,055
Zone 186	transln ca	Linear	Length (ft)	13,335	0.0	3,283	0	3,283	0	0	0	3,283
Zone 197	Commercial-Professional - Technical S	Point	Count	1	100.0	2	2	0				
	Commercial-Retail Trade	Point	Count	1	100.0	28	28	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,871	25.0	1,607	402	1,206				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,956	25.0	5,791	1,448	4,343				
	Gas oil wells	Point	Count	4	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	35,964	25.0	11,868	2,967	8,901				
	NG Pipelines	Linear	Length (ft)	5,539	0.0	1,800	0	1,800				
	Rail 1000 nodes	Point	Count	1	0.0	-	0	0				
	Residential - Manuf. Housing	Point	Count	15	100.0	518	518	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	260	260	0				
	Residential - Single Family Dwelling	Point	Count	55	100.0	7,749	7,749	0	13,374	0	0	16,250
Zone 206	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
	Commercial-Entertainment and Recrea	Point	Count	2	14.0	1,716	240	1,476				
	Commercial-Personal and Repair Serv	Point	Count	2	16.0	1,753	280	1,473				
	Commercial-Professional - Technical S	Point	Count	1	28.0	1,672	468	1,204				

	Commercial-Retail Trade	Point	Count	1	18.0	875	158	718				
	Commercial-Wholesale Trade	Point	Count	2	13.0	3,378	439	2,939				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,591	25.0	1,845	461	1,384				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,483	25.0	1,497	374	1,122				
	Elec Power HAZUS SDURS	Point	Count	1	49.0	129,800	63,602	66,198				
	gas oil production fields	Point	Area	112	0.0	-	0	0				
	Gas oil wells	Point	Count	7	0.0	-	0	0				
	Government - General Services	Point	Count	1	14.0	587	82	505				
	Hazmat HAZUS SDURS	Point	Count	28	0.0	-	0	0				
	mokelumne aqueduct pipe	Linear	Length (ft)	4,990	0.0	24,948	1,896	0				
	Oil HAZUS SDURS	Point	Count	1	20.0	118	24	94				
	Petroleum Pipelines	Linear	Length (ft)	56,141	0.0	11,790	0	11,790				
	Rail 1000 nodes	Point	Count	3	0.0	-	0	0				
	Rail HAZUS SDURS	Linear	Length (ft)	14,693	25.0	4,187	1,047	3,141				
	Residential - Institutional Dormitory	Point	Count	1	15.0	3,144	472	2,672				
	transln ca	Linear	Length (ft)	9,174	0.0	2,259	0	2,259	70,043	78,778	1,705	19,695
Zone 207	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,101	25.0	1,020	255	765				
	Petroleum Pipelines	Linear	Length (ft)	2,447	0.0	514	0	514				
	Rail HAZUS SDURS	Linear	Length (ft)	20,443	25.0	5,826	1,457	4,370	1,712	0	0	5,649
Zone 214	gas oil production fields	Point	Area	172	0.0	-	0	0				
	Gas oil wells	Point	Count	9	0.0	-	0	0				
	NG Pipelines	Linear	Length (ft)	1,418	0.0	269	0	269				
	NG Wells	Point	Count	2	0.0	-	0	0	0	0	0	269
Zone 216	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Residential - Single Family Dwelling	Point	Count	2	43.6	467	204	263	204	263	72	0
Zone 31	Residential - Single Family Dwelling	Point	Count	2	32.6	430	140	290	140	290	118	0
Zone 33	Residential - Single Family Dwelling	Point	Count	1	32.6	163	53	110	53	110	62	0
Zone 36	Commercial-Professional - Technical S	Point	Count	1	16.0	19	3	16				
	Commercial-Retail Trade	Point	Count	1	14.0	42	6	36				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	458	25.0	151	38	113				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,556	25.0	711	178	533				
	Hwy HAZUS SDURS	Linear	Length (ft)	782	25.0	258	65	194				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	22.5	17	4	13				
	Residential - Single Family Dwelling	Point	Count	21	20.8	4,753	986	3,767				
	solid waste facilities	Point	Count	1	25.0	-	0	0				
	transln ca	Linear	Length (ft)	3,946	0.0	971	0	971	1,279	3,832	661	1,812
Zone 37	Commercial-Entertainment and Recrea	Point	Count	1	11.0	1,771	195	1,576				
	Commercial-Personal and Repair Serv	Point	Count	2	12.0	2,071	249	1,822				
	Commercial-Professional - Technical S	Point	Count	1	16.0	5,148	824	4,324				
	Commercial-Retail Trade	Point	Count	1	14.0	1,902	266	1,636				
	Commercial-Wholesale Trade	Point	Count	1	8.0	2,219	178	2,041				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,472	25.0	1,476	369	1,107				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,211	25.0	3,042	761	2,282				
	hc ambulatory	Point	Count	1	14.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	388	25.0	128	32	96				
	Industrial - Heavy	Point	Count	3	12.0	7,499	900	6,599				
	Industrial - Light	Point	Count	1	14.0	2,336	327	2,009				
	Intermodal terminal facilities	Point	Count	1	0.0	-	0	0				
	Petroleum Pipelines	Linear	Length (ft)	7,203	0.0	1,513	0	1,513				
	Rail 1000 nodes	Point	Count	1	0.0	-	0	0				
	Rail Facility HAZUS SDURS	Point	Count	1	0.0	2,572	0	2,572				
	Rail HAZUS SDURS	Linear	Length (ft)	6,428	25.0	1,832	458	1,374				
	Residential - Duplex	Point	Count	10	22.5	2,862	644	2,218				
	Residential - Manuf. Housing	Point	Count	154	100.0	5,254	5,254	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	22.5	1,365	307	1,058				
	Residential - Multi-Dwellings - 20 to 49	Point	Count	1	22.5	5,734	1,290	4,444				
	Residential - Multi-Dwellings - 5 to 9 un	Point	Count	4	22.5	6,740	1,517	5,224				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	22.5	1,789	403	1,386				
	Residential - Single Family Dwelling	Point	Count	206	20.8	32,153	6,672	25,481				
	Residential - Triplex - Quads	Point	Count	10	22.5	2,779	625	2,154				
	Waste Water HAZUS SDURS	Point	Count	1	0.0	78,588	0	23,576				
	water_trans	Point	Count	2	0.0	-	0	0	21,268	88,122	7,355	6,371

Zone 38	Commercial-Entertainment and Recrea	Point	Count	1	12.0	1,367	164	1,203				
	Commercial-Personal and Repair Serv	Point	Count	3	13.0	3,204	417	2,787				
	Commercial-Professional - Technical S	Point	Count	1	22.0	2,104	463	1,641				
	Commercial-Retail Trade	Point	Count	1	16.0	2,043	327	1,716				
	Commercial-Wholesale Trade	Point	Count	3	11.0	6,617	728	5,889				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,630	25.0	868	217	651				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,931	25.0	3,186	797	2,390				
	Education - Colleges - Universities	Point	Count	1	9.0	5,278	475	4,803				
	Hazmat HAZUS SDURS	Point	Count	2	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,000	0	2,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	1,607	25.0	530	133	398				
	Industrial - Food - Drugs - Chemical	Point	Count	1	19.0	3,768	716	3,052				
	Industrial - Heavy	Point	Count	1	15.0	1,562	234	1,328				
	NG Pipelines	Linear	Length (ft)	874	0.0	166	0	166				
	Petroleum Pipelines	Linear	Length (ft)	80,209	0.0	16,844	0	16,844				
	Port HAZUS SDURS	Point	Count	1	0.0	2,572	0	2,572				
	Rail 1000 nodes	Point	Count	3	0.0	-	0	0				
	Rail Facility HAZUS SDURS	Point	Count	1	0.0	2,572	0	2,572				
	Rail HAZUS SDURS	Linear	Length (ft)	26,920	25.0	7,672	1,918	5,754				
	Residential - Duplex	Point	Count	6	25.5	1,104	282	822				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	25.5	124	32	92				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	25.5	548	140	408				
	Residential - Single Family Dwelling	Point	Count	34	25.8	5,907	1,521	4,386				
	transln_ca	Linear	Length (ft)	1,578	0.0	389	0	389	8,562	35,273	5,416	26,591
Zone 64	Commercial-Professional - Technical S	Point	Count	1	16.0	252	40	212				
	Commercial-Retail Trade	Point	Count	1	14.0	222	31	191				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	240	25.0	48	12	36				
	gas oil production fields	Point	Area	170	0.0	-	0	0				
	Gas oil wells	Point	Count	1	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,245	25.0	1,071	268	803				
	Industrial - Construction	Point	Count	1	31.0	1,152	357	795				
	NG Pipelines	Linear	Length (ft)	2,174	0.0	413	0	413				
	Residential - Manuf. Housing	Point	Count	2	100.0	95	95	0				
	Residential - Single Family Dwelling	Point	Count	20	20.8	3,581	743	2,838	1,546	4,035	3,517	1,252
Zone 65	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,749	25.0	350	87	262	87	0	0	262
Zone 69	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,234	25.0	847	212	635				
	gas oil production fields	Point	Area	17	0.0	-	0	0				
	Gas oil wells	Point	Count	2	0.0	-	0	0	212	0	0	635
Zone 74	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,313	25.0	1,423	356	1,068				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	21,041	25.0	4,208	1,052	3,156				
	gas oil production fields	Point	Area	505	0.0	-	0	0				
	Gas oil wells	Point	Count	19	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,003	25.0	661	165	496				
	NG Pipelines	Linear	Length (ft)	6,878	0.0	1,307	0	1,307				
	Petroleum Pipelines	Linear	Length (ft)	2,062	0.0	433	0	433				
	Rail HAZUS SDURS	Linear	Length (ft)	2,055	25.0	586	146	439				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	32.0	37	12	25				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	32.0	105	34	71				
	Residential - Single Family Dwelling	Point	Count	7	32.6	1,389	453	936				
	transln_ca	Linear	Length (ft)	7,333	0.0	1,805	0	1,805	2,218	1,032	29	8,704
Zone 75	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	424	25.0	140	35	105				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	17,385	25.0	3,477	869	2,608				
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,026	25.0	1,989	497	1,492				
	Residential - Manuf. Housing	Point	Count	1	100.0	52	52	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	45.5	28	13	15				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	45.5	154	70	84				
	Residential - Single Family Dwelling	Point	Count	29	43.6	6,060	2,644	3,416				
	solid waste facilities	Point	Count	1	25.0	-	0	0	4,680	5,016	133	4,204
	transln_ca	Linear	Length (ft)	1	0.0	-	0	0				
Zone 77	Commercial-Professional - Technical S	Point	Count	1	16.0	132	21	111				
	Commercial-Retail Trade	Point	Count	1	14.0	103	14	89				

Zone 78	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,434	25.0	2,783	696	2,087	1,980	3,392	441	4,381
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,010	25.0	402	101	302				
	Rail HAZUS SDURS	Linear	Length (ft)	4,345	25.0	1,238	310	929				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	22.5	6	1	5				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	22.5	110	25	85				
	Residential - Single Family Dwelling	Point	Count	19	20.8	3,915	812	3,103				
	transln_ca	Linear	Length (ft)	4,318	0.0	1,063	0	1,063				
	bridges not in HAZUS	Point	Count	3	25.0	3,000	750	2,250				
	Commercial-Professional - Technical S	Point	Count	1	38.0	77	29	48				
	Commercial-Retail Trade	Point	Count	1	23.0	31	7	24				
Zone 79	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,346	25.0	1,434	359	1,076	3,752	5,327	147	4,164
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,202	25.0	1,040	260	780				
	Gas oil wells	Point	Count	2	0.0	-	0	0				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,141	25.0	1,697	424	1,272				
	NG Pipelines	Linear	Length (ft)	51	0.0	17	0	17				
	Rail HAZUS SDURS	Linear	Length (ft)	2,167	25.0	618	154	463				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	38.5	15	6	9				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	38.5	123	47	76				
	Residential - Single Family Dwelling	Point	Count	24	37.0	4,636	1,715	2,921				
	transln_ca	Linear	Length (ft)	2,257	0.0	556	0	556				
Zone 80	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,349	25.0	3,070	767	2,302	1,361	1,693	68	3,233
	Gas oil wells	Point	Count	3	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	4,899	0.0	931	0	931				
	Residential - Single Family Dwelling	Point	Count	2	32.6	287	94	193				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,593	25.0	856	214	642				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,460	25.0	2,892	723	2,169				
	gas oil production fields	Point	Area	514	0.0	-	0	0				
	Gas oil wells	Point	Count	6	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
Zone 81	NG Pipelines	Linear	Length (ft)	6,090	0.0	1,157	0	1,157	1,503	1,659	57	4,779
	NG Wells	Point	Count	1	0.0	-	0	0				
	Petroleum Pipelines	Linear	Length (ft)	1,030	0.0	216	0	216				
	Residential - Single Family Dwelling	Point	Count	1	29.3	225	66	159				
	transln_ca	Linear	Length (ft)	2,416	0.0	595	0	595				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,356	25.0	1,871	468	1,403				
	Gas oil wells	Point	Count	6	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	5,160	0.0	980	0	980				
	NG Wells	Point	Count	2	0.0	-	0	0				
Zone 82	Residential - Manuf. Housing	Point	Count	1	100.0	20	20	0	1,328	2,080	49	2,384
	Residential - Single Family Dwelling	Point	Count	5	37.0	920	340	580				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,108	25.0	1,026	256	769				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	703	25.0	141	35	105				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,110	25.0	1,026	257	770				
	NG Pipelines	Linear	Length (ft)	10,954	0.0	2,081	0	2,081				
	transln_ca	Linear	Length (ft)	2,387	0.0	769	0	769				
	Commercial-Professional - Technical S	Point	Count	1	22.0	172	38	134				
	Commercial-Retail Trade	Point	Count	1	16.0	905	145	760				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,390	25.0	3,099	775	2,324				
Zone 90	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,262	25.0	2,852	713	2,139	548	0	0	4,494
	Hazmat HAZUS SDURS	Point	Count	33	0.0	-	0	0				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,140	25.0	1,366	342	1,025				
	Industrial - Food - Drugs - Chemical	Point	Count	1	19.0	4,194	797	3,397				
	Oil HAZUS SDURS	Point	Count	1	20.0	118	24	94				
	Petroleum Pipelines	Linear	Length (ft)	119,148	0.0	25,021	0	25,021				
	Rail HAZUS SDURS	Linear	Length (ft)	9,484	25.0	2,703	676	2,027				
	Residential - Single Family Dwelling	Point	Count	38	25.8	7,012	1,806	5,206				
	solid waste facilities	Point	Count	3	0.0	-	0	0				
Zone 90	TankFarms	Point	Count	1	0.0	3,000	0	3,000	6,814	17,092	500	34,293
	transln_ca	Linear	Length (ft)	7,135	0.0	1,757	0	1,757				

Table 7- 4a: Estimate of Asset Cost Damage and Repair Times- Mean Higher High Water - (MHHW) - 2050

Total Asset Value: \$8.5 Billion

1	2	3	4	5	6	7	8	9	10	11
<i>Island Name</i>	<i>Asset Type</i>	<i>Inventory Unit</i>	<i>Quantity (Expected 2050)</i>	<i>Expected Inundation Depth (2050 Conditions)</i>	<i>Percent Damage</i>	<i>Total Asset Value (Structure + Contents) (\$1,000)</i>	<i>Total Inundation Repair Costs (Structure + Contents + Debris) (\$1,000)</i>	<i>Per Island Inundation Repair Costs (\$1000)</i>	<i>Per Island Asset Value (\$1000)</i>	<i>Repair Time (Months)</i>
Bacon_Island	Delta Roads PBSJ Minor Roads	Length (ft)	37,655	23	25.0	7,531	2,071	31,587	43,917	6
	NG Pipelines DWR	Length (ft)	28,289	23	0.0	8,628	0			0
	PBSJ Gas Oil Wells	Count	8	23	-	0	0			0
	Residential - Institutional Dormitory	Count	5	23	100.0	27,758	29,515			24
Bethel_Island	Boatlaunch	Count	6	3	100.0	600	660	418,770	439,732	0
	Delta Roads PBSJ Minor Roads	Length (ft)	273,225	13	25.0	54,645	15,027			6
	NG Pipelines DWR	Length (ft)	23,384	13	0.0	4,443	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	722	13	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	24	11	-	0	0			0
	Residential - Duplex	Count	13	13	100.0	6,441	6,848			24
	Residential - Manufactured Housing	Count	785	13	100.0	40,168	41,681			24
	Residential - Single Family Dwelling	Count	1,206	13	100.0	331,005	351,969			24
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	16	100.0	2,430	2,584			24
	Solid Waste Facilities	Count	2	3	25.0	0	0			0
	Utilities ESRI	Count	2	9	-	0	0			0
	water_trans	Count	4	9	0.0	0	0			0
Bishop_Tract	Boatlaunch	Count	1	2	100.0	100	110	3,365	18,249	0
	Delta Roads PBSJ Minor Roads	Length (ft)	38,810	9	25.0	7,762	2,135			6
	PBSJ Gas Oil Wells	Count	1	2	-	0	0			0
	PBSJ Substation	Count	1	2	25.0	1,000	275			0
	Residential - Single Family Dwelling	Count	5	9	46.6	1,499	845			22
	Transmission Line	Length (ft)	32,039	9	-	7,888	0			0
Bixler_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	240	3	25.0	48	13	380	1,260	6
	PBSJ Gas Oil Production Fields	Area (Acres)	82	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	1	-	0	0			0
	Residential - Single Family Dwelling	Count	4	3	25.8	1,212	367			12
Bouldin_Island	air_trans	Count	1	20	-	0	0	14,359	25,898	0
	Commercial- Professional/ Technical Serv	Count	1	21	100.0	7,584	8,342			18
	Commercial- Retail Trade	Count	1	21	100.0	1,188	1,307			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,506	21	25.0	497	137			6
	Delta Roads PBSJ Minor Roads	Length (ft)	43,282	21	25.0	8,656	2,381			6
	Hwy HAZUS SDURS	Length (ft)	24,159	21	25.0	7,972	2,192			3
	PBSJ Gas Oil Production Fields	Area (Acres)	103	21	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	17	20	-	0	0			0
	Utilities ESRI	Count	1	1	-	0	0			0

Brack_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	62,658	14	25.0	12,532	3,446	5,608	19,967	6
	NG Pipelines DWR	Length (ft)	23,404	14	0.0	5,383	0			0
	PBSJ Gas Oil Wells	Count	19	13	-	0	0			0
	Residential - Manufactured Housing	Count	16	14	100.0	798	828			24
	Residential - Single Family Dwelling	Count	6	14	100.0	1,254	1,333			24
Bradford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	57,920	18	25.0	11,584	3,186	11,554	21,630	6
	NG Pipelines DWR	Length (ft)	7,466	18	0.0	2,165	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	897	18	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	16	18	-	0	0			0
	Residential - Duplex	Count	1	18	100.0	219	233			24
	Residential - Manufactured Housing	Count	9	18	100.0	444	461			24
	Residential - Single Family Dwelling	Count	27	18	100.0	7,218	7,675			24
Brannan-Andrus Island	air trans	Count	2	2	-	0	0	182,948	264,858	0
	Boatlaunch	Count	10	5	100.0	1,000	1,100			0
	Commercial - Entertainment and Recreation	Count	2	20	100.0	5,984	6,582			0
	Commercial- Professional/ Technical Serv	Count	2	20	100.0	15,264	16,790			18
	Commercial- Retail Trade	Count	2	20	100.0	10,952	12,047			18
	Delta Roads PBSJ Major Roads	Length (ft)	28,339	20	25.0	8,502	2,338			6
	Delta Roads PBSJ Minor Roads	Length (ft)	315,922	20	25.0	63,184	17,376			6
	hc hospitals	Count	2	2	0.0	0	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	2	5	0.0	4,000	0			0
	Hwy HAZUS SDURS	Length (ft)	55,613	20	25.0	18,352	5,047			3
	NG Pipelines DWR	Length (ft)	75,806	20	0.0	17,814	0			0
	NG Wells DWR Not in PBSJ	Count	2	27	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	9,089	20	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	157	15	-	0	0			0
	Residential - Duplex	Count	8	20	100.0	5,212	5,542			24
	Residential - Manufactured Housing	Count	356	20	100.0	18,442	19,137			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	2	20	100.0	7,158	7,611			24
	Residential - Single Family Dwelling	Count	365	20	100.0	78,720	83,705			24
	Residential - Triplex-Quads	Count	4	20	100.0	4,172	4,436			24
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	20	100.0	1,404	1,236			18
	Solid Waste Facilities	Count	2	17	25.0	0	0			0
	Transmission Line	Length (ft)	19,080	20	-	4,698	0			0
	water_trans	Count	3	9	0.0	0	0			0
Browns_Island	Hazmat HAZUS SDURS	Count	2	3	-	0	0	0	0	0
	Solid Waste Facilities	Count	1	3	25.0	0	0			0
Byron_Tract 1	Delta Roads PBSJ Minor Roads	Length (ft)	20,959	13	25.0	4,192	1,153	37,596	218,370	6
	Hwy HAZUS SDURS	Length (ft)	5,459	13	25.0	1,801	495			3
	PBSJ Gas Oil Wells	Count	2	3	-	0	0			0
	Residential - Manufactured Housing	Count	3	13	100.0	207	215			24
	Residential - Single Family Dwelling	Count	11	13	100.0	2,570	2,733			24
	Sewage Treat	Count	2	15	15.0	200,000	33,000			6
	Transmission Line	Length (ft)	29,816	13	-	9,600	0			0
Byron_Tract 2	bridges not in HAZUS	Count	5	3	0.0	5,000	0			0
	Commercial- Professional/ Technical Serv	Count	2	6	38.0	1,892	1,218			14
	Commercial- Retail Trade	Count	2	6	23.0	408	229			8
	Delta Roads PBSJ Minor Roads	Length (ft)	12,789	6	25.0	2,558	703			6
	Residential - Manufactured Housing	Count	3	6	100.0	142	144			24
	Residential - Single Family Dwelling	Count	17	6	37.0	5,266	2,352			18

	Transmission Line	Length (ft)	25,356	6	-	8,164	0	4,646	23,429	0
Cache_Haas_Tract 1	Delta Roads PBSJ Minor Roads	Length (ft)	79,382	3	25.0	15,876	4,366			6
	NG Pipelines DWR	Length (ft)	5,756	3	0.0	1,094	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,150	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	18	2	-	0	0			0
	Residential - Single Family Dwelling	Count	1	3	25.8	174	53			12
	Transmission Line	Length (ft)	13,005	3	-	4,187	0	4,419	21,331	0
Cache_Haas_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	9,203	4	25.0	1,841	506			6
	Hwy HAZUS SDURS	Length (ft)	2,392	5	25.0	789	217			3
	PBSJ Gas Oil Production Fields	Area (Acres)	603	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	20	5	-	0	0			0
	Residential - Manufactured Housing	Count	1	5	100.0	30	30			24
	Residential - Single Family Dwelling	Count	5	5	29.3	1,373	481			14
	Transmission Line	Length (ft)	567	4	-	183	0	1,234	4,215	0
Canal Ranch	Commercial- Professional/ Technical Serv	Count	3	11	100.0	8,586	8,500			18
	Commercial- Retail Trade	Count	3	11	42.0	5,634	3,780			15
	Delta Roads PBSJ Minor Roads	Length (ft)	34,708	11	25.0	6,942	1,909			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	2	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	1,066	11	0.0	203	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	297	11	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	11	13	-	0	0			0
	Residential - Manufactured Housing	Count	7	11	100.0	389	403			24
	Residential - Single Family Dwelling	Count	3	11	100.0	788	837	15,430	24,540	24
Chippis Island	PBSJ Gas Oil Wells	Count	2	6	-	0	0	0	0	0
Clifton Court Forebay Water	Boatlaunch	Count	1	1	100.0	100	110			0
	Commercial- Professional/ Technical Serv	Count	1	14	100.0	384	422			18
	Commercial- Retail Trade	Count	1	14	100.0	84	92			18
	Residential - Single Family Dwelling	Count	2	1	16.4	504	93			8
	Transmission Line	Length (ft)	9,733	1	-	3,134	0	717	4,206	0
Coney Island	Residential - Manufactured Housing	Count	10	15	100.0	507	526			24
	Residential - Single Family Dwelling	Count	66	15	100.0	21,414	22,770	23,296	21,921	24
Deadhorse Island	NG Pipelines DWR	Length (ft)	3,862	13	0.0	734	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	211	14	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	11	-	0	0			0
	Residential - Single Family Dwelling	Count	1	13	100.0	255	271			24
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	13	100.0	9	10	281	998	24
Decker Island	NG Pipelines DWR	Length (ft)	8,085	3	0.0	1,536	0	0	1,536	0
Egbert_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	120,623	7	25.0	24,125	6,634			6
	NG Pipelines DWR	Length (ft)	23,270	7	0.0	5,585	0			0
	NG Wells DWR Not in PBSJ	Count	3	4	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,020	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	67	5	-	0	0			0
	Residential - Manufactured Housing	Count	3	7	100.0	117	120			24
	Residential - Single Family Dwelling	Count	15	7	37.0	3,889	1,805			18
	Transmission Line	Length (ft)	6,914	7	-	2,226	0	8,559	35,942	0
Elk_Grove 1	Hwy HAZUS SDURS	Length (ft)	764	4	25.0	252	69	69	252	3
Empire_Tract	Boatlaunch	Count	4	27	100.0	400	440			0
	Delta Roads PBSJ Minor Roads	Length (ft)	136,956	26	25.0	27,391	7,533			6
	PBSJ Gas Oil Wells	Count	5	23	-	0	0			0

Fabian_Tract	Residential - Manufactured Housing	Count	19	26	100.0	1,031	1,070	10,855	30,527	24
	Residential - Single Family Dwelling	Count	10	26	100.0	1,705	1,813			24
	Boatlaunch	Count	4	2	100.0	400	440			0
	Commercial- Retail Trade	Count	4	6	20.0	1,192	649			7
	Delta_Roads PBSJ Minor_Roads	Length (ft)	153,701	6	25.0	30,740	8,454			6
	NG Pipelines DWR	Length (ft)	1,818	6	0.0	345	0			0
	PBSJ Gas Oil Wells	Count	4	5	-	0	0			0
	Residential - Duplex	Count	11	6	32.0	4,120	1,689			15
	Residential - Institutional Dormitory	Count	7	6	15.0	29,474	8,408			7
	Residential - Manufactured Housing	Count	35	6	100.0	1,811	1,846			24
	Residential - Single Family Dwelling	Count	55	6	32.6	11,390	4,721			16
Fay Island	Transmission Line	Length (ft)	24,537	6	-	6,041	0	26,207	85,513	0
	Delta_Roads PBSJ Minor_Roads	Length (ft)	113	14	25.0	23	6	6	23	6
Glanville_Tract	Delta_Roads PBSJ Major Roads	Length (ft)	7,873	4	25.0	2,598	714	1,341	6,497	6
	Delta_Roads PBSJ Minor Roads	Length (ft)	5,515	4	25.0	1,103	303			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	9	0.0	2,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	89	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	10	4	-	0	0			0
	Residential - Manufactured Housing	Count	2	5	100.0	69	69			24
	Residential - Single Family Dwelling	Count	4	5	29.3	694	243			14
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	5	28.5	33	11			14
	Transmission Line	Length (ft)	48,859	15	-	12,030	0			0
Grand Island	Agriculture	Count	1	15	100.0	8,486	8,028	193,064	253,981	18
	Boatlaunch	Count	1	2	100.0	100	110			0
	Commercial - Banks	Count	1	15	44.0	1,084	859			16
	Commercial- Professional/ Technical Serv	Count	1	22	100.0	6,378	7,016			18
	Commercial- Retail Trade	Count	1	22	100.0	6,638	7,302			18
	Delta_Roads PBSJ Major Roads	Length (ft)	3,302	15	25.0	1,090	300			6
	Delta_Roads PBSJ Minor Roads	Length (ft)	169,393	15	25.0	33,879	9,317			6
	Hwy Bridge HAZUS SDURS	Length (ft)	2	2	0.0	4,000	0			0
	Hwy HAZUS SDURS	Length (ft)	75,586	15	25.0	24,943	6,859			3
	Industrial - Light	Count	7	15	100.0	39,675	36,311			18
	NG Pipelines DWR	Length (ft)	11,590	15	0.0	2,202	0			0
	NG Wells DWR Not in PBSJ	Count	1	12	-	0	0			0
	PBSJ Cell Towers	Count	1	2	-	250	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,816	15	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	96	14	-	0	0			0
	PBSJ Substation	Count	1	18	25.0	1,000	275			0
	Residential - Duplex	Count	5	15	100.0	2,526	2,686			24
	Residential - Institutional Dormitory	Count	1	15	47.0	5,649	3,476			23
	Residential - Manufactured Housing	Count	39	15	100.0	2,070	2,148			24
	Residential - Single Family Dwelling	Count	366	15	100.0	97,205	103,361			24
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	22	100.0	3,597	3,825			24
Hastings_Tract 1	Schools HAZUS SDURS	Count	1	17	100.0	1,180	1,194			18
	Transmission Line	Length (ft)	48,859	15	-	12,030	0			0
Hastings_Tract 2	Commercial- Retail Trade	Count	1	4	16.0	6	3	3	6	6
	PBSJ Gas Oil Production Fields	Area (Acres)	46	4	0.0	0	0			0
Hastings_Tract 2	Commercial- Retail Trade	Count	1	5	20.0	162	86			7
	Delta_Roads PBSJ Minor Roads	Length (ft)	27,793	5	25.0	5,559	1,529			6
	PBSJ Gas Oil Production Fields	Area (Acres)	464	5	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	37	4	-	0	0			0

	Residential - Manufactured Housing	Count	1	5	100.0	59	59			24
	Residential - Single Family Dwelling	Count	10	5	32.6	2,700	1,068			16
	Transmission Line	Length (ft)	11,505	5	-	3,704	0	2,742	12,183	0
Holland_Land	Hwy_HAZUS_SDURS	Length (ft)	68,171	4	25.0	22,496	6,187	6,187	22,496	3
Holland_Tract	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	52,160	18	25.0	10,432	2,869			6
	Hwy_Bridge_HAZUS_SDURS	Length (ft)	1	12	0.0	2,000	0			0
	PBSJ_Gas_Oil_Wells	Count	11	15	-	0	0			0
	Residential - Manufactured Housing	Count	4	17	100.0	192	199			24
	Residential - Single Family Dwelling	Count	12	17	100.0	3,164	3,364	6,432	15,788	24
Honker_Bay_Club	NG_Pipelines_DWR	Length (ft)	4,395	6	0.0	835	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	47	6	0.0	0	0			0
	Petr_Pipelines_DWR	Length (ft)	4,804	6	0.0	1,009	0			0
	Residential - Single Family Dwelling	Count	3	6	32.6	801	317	317	2,645	16
Hotchkiss_Tract 1	Boatlaunch	Count	2	7	100.0	200	220			0
	Commercial- Professional/ Technical Serv	Count	2	12	100.0	6,052	5,991			18
	Commercial- Retail Trade	Count	2	12	42.0	1,308	878			15
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	88,936	8	25.0	17,787	4,891			6
	Hwy_Bridge_HAZUS_SDURS	Length (ft)	1	2	0.0	2,000	0			0
	NG_Pipelines_DWR	Length (ft)	21,048	8	0.0	3,999	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	846	8	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	25	7	-	0	0			0
	Residential - Duplex	Count	10	8	45.5	4,130	2,238			22
	Residential - Manufactured Housing	Count	157	8	100.0	8,275	8,526			24
	Residential - Single Family Dwelling	Count	493	8	43.6	134,779	71,188			21
	Residential - Triplex-Quads	Count	4	8	45.5	1,851	1,003			22
	Transmission Line	Length (ft)	45,599	8	-	14,681	0	94,936	195,063	0
Hotchkiss_Tract 2	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	6,887	8	25.0	1,377	379			6
	NG_Pipelines_DWR	Length (ft)	2,371	8	0.0	450	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	173	8	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	2	7	-	0	0	379	1,828	0
Jersey_Island	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	37,574	17	25.0	7,515	2,067			6
	NG_Pipelines_DWR	Length (ft)	11,881	17	0.0	7,426	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	630	17	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	15	14	-	0	0			0
	Residential - Manufactured Housing	Count	1	17	100.0	65	67			24
	Residential - Single Family Dwelling	Count	4	17	100.0	1,065	1,132			24
	Solid Waste Facilities	Count	1	23	25.0	0	0			0
	Transmission Line	Length (ft)	26,539	17	-	8,545	0	3,266	24,615	0
Jones_Tract-Upper_and_Low	bridges not in HAZUS	Count	1	4	0.0	1,000	0			0
	Commercial- Professional/ Technical Serv	Count	2	22	100.0	956	1,052			18
	Commercial- Retail Trade	Count	2	22	100.0	176	194			18
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	125,979	18	25.0	25,196	6,929			6
	gas pipeline kinder morgan LS 9	Length (ft)	27,507	18	0.0	5,776	0			0
	Hwy_Bridge_HAZUS_SDURS	Length (ft)	1	16	0.0	2,000	0			0
	NG_Pipelines_DWR	Length (ft)	15,033	18	0.0	24,203	0			0
	NG Storage	Count	1	4	0.0	0	0			0
	PBSJ Cell Towers	Count	2	4	-	500	0			0
	PBSJ_Gas_Oil_Production_Fields	Area (Acres)	7,820	18	0.0	0	0			0
	PBSJ_Gas_Oil_Wells	Count	6,859	19	-	0	0			0
	PBSJ_Mokelumne_Aqueduct	Length (ft)	82,208	18	-	411,040	34,363			1

King_Island	Rail Bridge HAZUS SDURS	Count	2	13	100.0	2,000	0	89,642	517,823	1
	Rail HAZUS SDURS	Length (ft)	28,473	9	100.0	8,115	8,800			1
	Residential - Duplex	Count	3	6	32.0	1,307	511			15
	Residential - Institutional Dormitory	Count	5	20	100.0	32,351	34,400			24
	Residential - Manufactured Housing	Count	10	18	100.0	445	462			24
	Residential - Single Family Dwelling	Count	14	18	100.0	2,757	2,932			24
	Boatlaunch	Count	4	18	100.0	400	440			0
	Commercial - Entertainment and Recreation	Count	4	19	100.0	7,088	7,797			0
	Commercial- Professional/ Technical Serv	Count	4	19	100.0	7,464	8,210			18
	Commercial- Retail Trade	Count	4	19	100.0	54,176	59,594			18
Libby_McNeil_Tract 1	Delta_Roads PBSJ Minor Roads	Length (ft)	162,620	20	25.0	32,524	8,944	140,702	158,332	6
	Hwy Bridge HAZUS SDURS	Length (ft)	2	18	0.0	4,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	179	20	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	10	19	-	0	0			0
	Residential - Duplex	Count	4	19	100.0	1,122	1,193			24
	Residential - Institutional Dormitory	Count	4	19	100.0	21,336	22,687			24
	Residential - Manufactured Housing	Count	230	19	100.0	11,681	12,121			24
	Residential - Single Family Dwelling	Count	92	19	100.0	18,542	19,716			24
	water_trans	Count	4	25	0.0	0	0			0
	Commercial- Professional/ Technical Serv	Count	2	5	35.0	2,220	1,368			13
Libby_McNeil_Tract 2	Commercial- Retail Trade	Count	2	5	20.0	2,672	1,426	11,348	27,884	7
	Communication HAZUS SDURS	Count	2	2	0.0	236	0			0
	Delta_Roads PBSJ Major Roads	Length (ft)	5,110	6	25.0	1,686	464			6
	Delta_Roads PBSJ Minor Roads	Length (ft)	14,141	6	25.0	2,828	778			6
	PBSJ Gas Oil Production Fields	Area (Acres)	145	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	7	4	-	0	0			0
	Residential - Duplex	Count	6	5	32.0	2,619	1,024			15
	Residential - Manufactured Housing	Count	3	5	100.0	182	184			24
	Residential - Single Family Dwelling	Count	57	5	32.6	15,440	6,106			16
	Boatlaunch	Count	2	2	100.0	200	220			0
Liberte Island	Commercial- Retail Trade	Count	2	3	16.0	4	2	716	1,848	6
	Delta_Roads PBSJ Minor Roads	Length (ft)	480	3	25.0	96	26			6
	PBSJ Gas Oil Production Fields	Area (Acres)	44	3	0.0	0	0			0
	Residential - Single Family Dwelling	Count	6	3	25.8	1,548	468			12
	Delta_Roads PBSJ Minor Roads	Length (ft)	35,790	2	25.0	7,158	1,968			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	2	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	28,637	3	0.0	5,441	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	743	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	23	2	-	0	0			0
	Hwy HAZUS SDURS	Length (ft)	56,502	12	25.0	18,646	5,128			3
Lincoln_Village_Tract	Residential - Single Family Dwelling	Count	1	1	16.4	234	43	5,195	18,902	8
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	12	100.0	17	18			24
	Residential- Multi- Dwellings- 20 to 49 unit	Count	1	12	100.0	6	6			24
	Delta_Roads PBSJ Minor Roads	Length (ft)	5,820	4	25.0	1,164	320			6
	PBSJ Gas Oil Production Fields	Area (Acres)	127	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	8	3	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	9,382	4	25.0	2,674	735			1
	Residential - Duplex	Count	2	4	28.5	237	82			14
	Residential - Single Family Dwelling	Count	25	4	29.3	6,829	2,391			14
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	4	28.5	363	125			14

	Transmission Line	Length (ft)	7,609	4	-	1,873	0	3,653	13,140	0
Little Holland Tract	PBSJ Gas Oil Production Fields	Area (Acres)	89	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	2	-	0	0	0	0	0
Little Egbert Tract	Delta Roads PBSJ Minor Roads	Length (ft)	35,665	12	25.0	7,133	1,962			6
	Hwy HAZUS SDURS	Length (ft)	317	13	25.0	105	29			3
	NG Pipelines DWR	Length (ft)	10,821	13	0.0	2,597	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	652	12	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	24	12	-	0	0			0
	Residential - Manufactured Housing	Count	3	13	100.0	81	84			24
	Residential - Single Family Dwelling	Count	11	13	100.0	2,693	2,863	4,938	12,608	24
Lower Roberts Island	Delta Roads PBSJ Minor Roads	Length (ft)	11,403	7	25.0	2,281	627			6
	PBSJ Gas Oil Wells	Count	1	1	-	0	0			0
	Residential - Manufactured Housing	Count	3	7	100.0	90	92			24
	Residential - Single Family Dwelling	Count	3	7	39.1	563	270	989	2,933	19
Mandeville Island	Delta Roads PBSJ Minor Roads	Length (ft)	26,063	24	25.0	5,213	1,433			6
	PBSJ Gas Oil Wells	Count	10	27	-	0	0	1,433	5,213	0
McCormack Williamson Tract	Communication HAZUS SDURS	Count	2	2	0.0	236	0			0
	Delta Roads PBSJ Minor Roads	Length (ft)	9,930	5	25.0	1,986	546			6
	NG Pipelines DWR	Length (ft)	4,699	5	0.0	893	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	885	5	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	18	5	-	0	0	546	3,115	0
McDonald Tract	Delta Roads PBSJ Minor Roads	Length (ft)	67,361	24	25.0	13,472	3,705			6
	NG Pipelines DWR	Length (ft)	20,905	24	0.0	6,376	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,056	24	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	105	20	-	0	0			0
	Residential - Institutional Dormitory	Count	3	24	100.0	16,398	17,437	21,141	36,246	24
	Hwy HAZUS SDURS	Length (ft)	23,053	5	25.0	7,607	2,092	2,092	7,607	3
McMullin Ranch-River Junction	Delta Roads PBSJ Minor Roads	Length (ft)	28,314	20	25.0	5,663	1,557			6
	Residential - Institutional Dormitory	Count	1	20	100.0	2,897	3,080	4,637	8,559	24
Medford Island	Commercial- Professional/ Technical Serv	Count	2	4	28.0	712	392			10
	Commercial- Retail Trade	Count	2	4	18.0	156	77			6
	Delta Roads PBSJ Major Roads	Length (ft)	2,454	4	25.0	810	223			6
	Delta Roads PBSJ Minor Roads	Length (ft)	43,719	4	25.0	8,744	2,405			6
	PBSJ Gas Oil Production Fields	Area (Acres)	70	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	9	3	-	0	0			0
	Residential - Manufactured Housing	Count	3	4	100.0	218	216			24
	Residential - Single Family Dwelling	Count	47	4	29.3	12,674	4,438			14
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	4	28.5	198	68	7,818	23,512	14
	Boatlaunch	Count	3	19	100.0	300	330			0
Middle Roberts Island	bridges not in HAZUS	Count	1	10	0.0	1,000	0			0
	Commercial - Personal and Repair Service	Count	1	12	39.0	1,226	802			14
	Commercial- Professional/ Technical Serv	Count	1	15	100.0	716	788			18
	Commercial- Retail Trade	Count	1	15	100.0	566	623			18
	Dams HAZUS SDURS	Count	1	3	0.0	0	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	23,426	11	25.0	7,731	2,126			6
	Delta Roads PBSJ Minor Roads	Length (ft)	288,291	11	25.0	57,658	15,856			6
	gas pipeline kinder morgan LS 9	Length (ft)	24,055	11	0.0	5,052	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	1	5	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	59,509	12	0.0	11,307	0			0

	NG Wells DWR Not in PBSJ	Count	1	2	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	7,820	11	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	6,859	11	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	66,109	12	0	330,545	0			0
	Petr Pipelines DWR	Length (ft)	9,152	15	0.0	1,922	0			0
	Rail HAZUS SDURS	Length (ft)	27,702	12	25.0	7,895	2,171			1
	Residential - Duplex	Count	8	7	43.0	3,395	1,725			21
	Residential - Institutional Dormitory	Count	6	4	15.0	36,285	8,914			7
	Residential - Manufactured Housing	Count	37	12	100.0	1,889	1,960			24
	Residential - Single Family Dwelling	Count	135	10	48.6	31,622	18,696			23
	Schools HAZUS SDURS	Count	1	16	45.0	1,180	837			16
	Solid Waste Facilities	Count	1	3	25.0	0	0			0
	Transmission Line	Length (ft)	164,314	11	-	40,456	0	54,828	542,743	0
Netherlands 2	air_trans	Count	1	1	-	0	0			0
	Commercial- Professional/ Technical Serv	Count	1	4	28.0	276	156			10
	Commercial- Retail Trade	Count	1	4	18.0	1,354	693			6
	Delta Roads PBSJ Major Roads	Length (ft)	12,559	4	25.0	4,144	1,140			6
	Delta Roads PBSJ Minor Roads	Length (ft)	269,394	4	25.0	53,879	14,817			6
	Fire Stations HAZUS SDURS	Count	1	1	7.0	1,770	463			3
	hc_ambulatory	Count	1	4	13.0	0	0			5
	Hwy Bridge HAZUS SDURS	Length (ft)	1	1	0.0	2,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	613	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	70	3	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	2,051	4	25.0	585	161			1
	Residential - Institutional Dormitory	Count	1	4	15.0	6,960	1,710			7
	Residential - Manufactured Housing	Count	5	4	100.0	365	365			24
	Residential - Single Family Dwelling	Count	171	4	29.3	44,922	15,730			14
New_Hope_Tract	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	4	28.5	833	287			14
	Solid Waste Facilities	Count	2	1	25.0	0	0	35,521	117,087	0
	Agriculture	Count	2	6	30.0	7,212	3,808			11
	Boatlaunch	Count	4	3	100.0	400	440			0
	Commercial- Professional/ Technical Serv	Count	2	6	38.0	1,280	824			14
	Commercial- Retail Trade	Count	2	6	23.0	4,192	2,352			8
	Delta Roads PBSJ Major Roads	Length (ft)	13,319	7	25.0	4,395	1,209			6
	Delta Roads PBSJ Minor Roads	Length (ft)	91,396	7	25.0	18,279	5,027			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	2	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	30,823	6	0.0	5,856	0			0
	PBSJ Cell Towers	Count	1	2	-	250	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,678	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	56	4	-	0	0			0
	Residential - Manufactured Housing	Count	139	6	100.0	7,181	7,320			24
Orwood_Tract	Residential - Single Family Dwelling	Count	58	6	37.0	12,009	5,363			18
	water_trans	Count	2	3	0.0	0	0	26,342	63,054	0
	Commercial- Professional/ Technical Serv	Count	1	20	100.0	740	814			18
	Commercial- Retail Trade	Count	1	20	100.0	50	55			18
	Delta Roads PBSJ Minor Roads	Length (ft)	24,363	15	25.0	4,873	1,340			6
	gas pipeline kinder morgan LS 9	Length (ft)	14,840	15	0.0	3,116	0			0
	NG Pipelines DWR	Length (ft)	6,497	16	0.0	1,819	0			0
	PBSJ Gas Oil Wells	Count	14,840	18	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	40,546	16	-	202,730	16,948			1

	Residential - Manufactured Housing	Count	1	16	100.0	47	48	52,616	247,313	24
	Residential - Single Family Dwelling	Count	83	13	100.0	31,421	33,410			24
	Transmission Line	Length (ft)	7,820	8	-	2,518	0			0
Palm_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	24,442	19	25.0	4,888	1,344	6,973	22,563	6
	NG Pipelines DWR	Length (ft)	27,094	19	0.0	7,586	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	101	19	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	19	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	12,632	19	25.0	3,600	990			1
	Residential - Manufactured Housing	Count	2	19	100.0	102	106			24
	Residential - Single Family Dwelling	Count	13	19	100.0	4,263	4,533			24
	Transmission Line	Length (ft)	6,595	19	-	2,123	0			0
Peter Pocket	Hwy HAZUS SDURS	Length (ft)	5,832	3	25.0	1,925	529	619	2,575	3
	PBSJ Gas Oil Production Fields	Area (Acres)	511	9	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	1	-	0	0			0
	Residential - Single Family Dwelling	Count	1	3	20.8	372	90			10
	Transmission Line	Length (ft)	865	3	-	279	0			0
Pico_Naglee_Tract	Commercial- Professional/ Technical Serv	Count	2	3	22.0	280	129	11,447	40,759	8
	Commercial- Retail Trade	Count	2	3	16.0	392	168			6
	Delta Roads PBSJ Major Roads	Length (ft)	9,806	3	25.0	3,236	890			6
	Delta Roads PBSJ Minor Roads	Length (ft)	36,968	3	25.0	7,394	2,033			6
	NG Pipelines DWR	Length (ft)	14,033	3	0.0	2,666	0			0
	PBSJ Gas Oil Wells	Count	2	3	-	0	0			0
	Residential - Manufactured Housing	Count	7	3	100.0	305	295			24
	Residential - Single Family Dwelling	Count	83	3	25.8	26,220	7,932			12
	Transmission Line	Length (ft)	1,082	3	-	266	0			0
	Utilities_ESRI	Count	2	1	-	0	0			0
Pierson_Tract	Commercial - Personal and Repair Service	Count	2	10	35.0	3,140	1,986	42,381	92,760	13
	Commercial- Professional/ Technical Serv	Count	2	10	100.0	4,412	4,368			18
	Commercial- Retail Trade	Count	2	10	38.0	1,912	1,241			14
	Communication HAZUS SDURS	Count	4	7	100.0	472	519			18
	Delta Roads PBSJ Major Roads	Length (ft)	14,148	11	25.0	4,669	1,284			6
	Delta Roads PBSJ Minor Roads	Length (ft)	116,302	11	25.0	23,260	6,397			6
	Fire Stations HAZUS SDURS	Count	2	3	10.0	3,540	1,441			4
	Hwy Bridge HAZUS SDURS	Length (ft)	2	3	0.0	4,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	279	11	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	16	8	-	0	0			0
	Residential - Duplex	Count	3	10	49.5	1,922	1,148			24
	Residential - Manufactured Housing	Count	19	10	100.0	1,004	1,041			24
	Residential - Single Family Dwelling	Count	172	10	48.6	35,792	21,162			23
	Residential - Triplex-Quads	Count	2	10	49.5	981	586			24
	Schools HAZUS SDURS	Count	3	3	7.0	3,540	1,207			3
	Transmission Line	Length (ft)	16,720	11	-	4,117	0			0
Pittsburg	Commercial- Professional/ Technical Serv	Count	2	4	28.0	176	97			10
	Commercial- Retail Trade	Count	2	4	18.0	36	18			6
	Delta Roads PBSJ Minor Roads	Length (ft)	1,044	4	25.0	209	57			6
	NG Pipelines DWR	Length (ft)	3,074	4	0.0	584	0			0
	PBSJ Substation	Count	1	3	25.0	1,000	275			0
	Petr Pipelines DWR	Length (ft)	3,752	4	0.0	788	0			0
	Ports HAZUS SDURS	Count	2	8	0.0	5,145	0			0
	Rail HAZUS SDURS	Length (ft)	10,239	4	25.0	2,918	802			1

	Residential - Manufactured Housing	Count	2	4	100.0	87	86			24
	Residential - Single Family Dwelling	Count	53	4	29.3	15,945	5,584			14
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	4	28.5	1,371	473			14
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	4	28.5	915	315			14
	Transmission Line	Length (ft)	24,176	4	-	5,952	0	7,707	35,127	0
Prospect_Island	Delta Roads PBSJ Minor Roads	Length (ft)	5,398	4	25.0	1,080	297			6
	PBSJ Gas Oil Production Fields	Area (Acres)	302	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	11	3	-	0	0			0
	Residential - Single Family Dwelling	Count	2	4	29.3	707	247			14
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	4	28.5	2	1	545	1,788	14
Quimby_Island	bridges not in HAZUS	Count	1	14	0.0	1,000	0			0
	PBSJ Gas Oil Wells	Count	1	19	-	0	0			0
	Residential - Single Family Dwelling	Count	1	20	100.0	126	134	134	1,126	24
Rindge_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	334,873	23	25.0	66,975	18,418			6
	PBSJ Cell Towers	Count	1	12	-	250	0			0
	PBSJ Gas Oil Wells	Count	14	21	-	0	0			0
	Residential - Duplex	Count	4	22	100.0	1,146	1,219			24
	Residential - Manufactured Housing	Count	8	22	100.0	528	548			24
	Residential - Single Family Dwelling	Count	16	22	100.0	3,384	3,598	23,783	72,283	24
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	2,927	7	25.0	585	161			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	13	0.0	2,000	0			0
	Hwy HAZUS SDURS	Length (ft)	496	7	25.0	164	45			3
	PBSJ Gas Oil Production Fields	Area (Acres)	1	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	7	-	0	0			0
	Transmission Line	Length (ft)	9,406	7	-	2,316	0	206	5,065	0
Roberts_Island	Boatlaunch	Count	3	1	100.0	300	330			0
	Hwy_HAZUS_SDURS	Length (ft)	44,684	4	25.0	14,749	4,056	4,386	15,049	3
Rough_and_Ready_Island	air trans	Count	1	1	-	0	0			0
	Commercial - Entertainment and Recreation	Count	1	7	18.0	1,224	660			0
	Commercial - Personal and Repair Service	Count	1	7	22.0	2,282	1,280			8
	Commercial - Wholesale Trade	Count	3	7	19.0	11,204	6,101			7
	Commercial- Professional/ Technical Serv	Count	1	7	38.0	452	293			14
	Commercial- Retail Trade	Count	1	7	23.0	1,386	785			8
	Delta Roads PBSJ Major Roads	Length (ft)	8,041	6	25.0	2,654	730			6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,660	6	25.0	12,732	3,501			6
	Hazmat HAZUS SDURS	Count	3	1	-	0	0			0
	Industrial - Heavy	Count	1	7	26.0	3,808	1,868			9
	PBSJ Gas Oil Wells	Count	1	5	-	0	0			0
	Petr Pipelines DWR	Length (ft)	11,908	7	0.0	2,501	0			0
	Rail HAZUS SDURS	Length (ft)	28,933	7	25.0	8,246	2,268			1
	Residential - Duplex	Count	3	7	38.5	912	417			18
	Residential - Manufactured Housing	Count	8	7	100.0	422	431			24
	Residential - Single Family Dwelling	Count	13	7	37.0	2,693	1,202	19,537	50,514	18
Ryer Island	Delta Roads PBSJ Major Roads	Length (ft)	1,851	13	25.0	611	168			6
	Delta Roads PBSJ Minor Roads	Length (ft)	116,873	13	25.0	23,375	6,428			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	2	0.0	2,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	412	13	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	22	10	-	0	0			0
	Residential - Manufactured Housing	Count	7	13	100.0	360	374			24
	Residential - Single Family Dwelling	Count	61	13	100.0	16,490	17,534	24,503	42,835	24

Sargent_Barnhart_Tract 2	air trans	Count	1	8	-	0	0			0
	Commercial- Professional/ Technical Serv	Count	1	10	47.0	8,908	6,222			17
	Commercial- Retail Trade	Count	1	10	34.0	4,026	2,524			12
	Delta Roads PBSJ Minor Roads	Length (ft)	125,110	10	25.0	25,022	6,881			6
	gas pipeline kinder morgan LS 9	Length (ft)	6,859	10	0.0	1,440	0			0
	hc ambulatory	Count	20	10	22.0	0	0			8
	hc hospitals	Count	1	10	47.0	0	0			17
	hc nursing res	Count	2	10	23.0	0	0			11
	PBSJ Mokelumne Aqueduct	Length (ft)	20,301	10	0	101,505	0			0
	PBSJ Substation	Count	1	14	25.0	1,000	275			0
	Residential - Institutional Dormitory	Count	1	10	23.0	5,612	2,193			11
	Residential - Manufactured Housing	Count	10	10	100.0	795	822			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	5	10	48.0	15,809	9,077			23
	Residential - Single Family Dwelling	Count	1,518	10	46.6	517,566	291,968			22
	Residential - Triplex-Quads	Count	23	10	48.0	9,090	5,219			23
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	10	48.0	1,271	730			23
	Residential- Multi- Dwellings- 20 to 49 unit	Count	1	10	48.0	879	505			23
	Schools_HAZUS_SDURS	Count	1	10	17.0	1,180	655			6
	Transmission Line	Length (ft)	10,183	10	-	2,507	0	327,072	696,609	0
Sargent_Barnhart_Tract 3	Commercial - Entertainment and Recreation	Count	7	1	9.0	11,302	1,865			0
	Commercial - Personal and Repair Service	Count	1	1	9.0	986	163			3
	Commercial- Professional/ Technical Serv	Count	2	1	11.0	7,668	1,350			4
	Commercial- Retail Trade	Count	2	1	9.0	472	78			3
	Delta Roads PBSJ Minor Roads	Length (ft)	1,859	1	25.0	372	102			6
	Residential - Multi-Dwellings - 5 to 9 units	Count	2	1	15.5	1,305	232			7
	Residential - Single Family Dwelling	Count	35	1	16.4	10,687	1,965			8
	Residential - Triplex-Quads	Count	2	1	15.5	420	75			7
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	1	15.5	150	27			7
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	1	15.5	213	38	5,893	33,574	7
Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Length (ft)	26,277	8	25.0	5,255	1,445			6
	PBSJ Gas Oil Wells	Count	1	7	-	0	0			0
	Residential - Single Family Dwelling	Count	5	8	43.6	1,553	820	2,265	6,808	21
Sherman_Island	Boatlaunch	Count	5	2	100.0	500	550			0
	Commercial- Professional/ Technical Serv	Count	2	18	100.0	552	607			18
	Commercial- Retail Trade	Count	2	18	100.0	1,920	2,112			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,522	18	25.0	502	138			6
	Delta Roads PBSJ Minor Roads	Length (ft)	119,684	18	25.0	23,937	6,583			6
	Hwy HAZUS_SDURS	Length (ft)	38,217	18	25.0	12,612	3,468			3
	NG Pipelines DWR	Length (ft)	145,514	18	0.0	48,020	0			0
	NG Wells DWR Not in PBSJ	Count	1	17	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,083	18	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	60	16	-	0	0			0
	Residential - Duplex	Count	2	18	100.0	1,290	1,372			24
	Residential - Manufactured Housing	Count	63	18	100.0	3,240	3,362			24
	Residential - Single Family Dwelling	Count	54	18	100.0	11,228	11,939			24
	Residential - Triplex-Quads	Count	2	18	100.0	969	1,030			24
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	18	100.0	225	239			24
	Transmission Line	Length (ft)	71,300	18	-	22,956	0	31,400	127,950	0
Shima_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	5,202	9	25.0	1,040	286			6
	Transmission Line	Length (ft)	24,926	9	-	6,137	0	286	7,177	0

Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	1,485	7	25.0	297	82			6
	PBSJ Gas Oil Production Fields	Area (Acres)	2	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	3	-	0	0			0
	Transmission Line	Length (ft)	2,073	7	-	510	0	82	807	0
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Count	3	5	32.6	756	299	299	756	16
SM-123	Delta Roads PBSJ Minor Roads	Length (ft)	14,142	3	25.0	2,828	778			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	5	0.0	2,000	0			0
	Petr Pipelines DWR	Length (ft)	7	3	0.0	1	0			0
	Residential - Single Family Dwelling	Count	3	3	20.8	540	130			10
	Transmission Line	Length (ft)	312	3	-	77	0	908	5,447	0
SM-124	Commercial- Professional/ Technical Serv	Count	2	4	28.0	3,692	2,031			10
	Commercial- Retail Trade	Count	2	4	18.0	2,612	1,293			6
	Delta Roads PBSJ Major Roads	Length (ft)	725	4	25.0	239	66			6
	Delta Roads PBSJ Minor Roads	Length (ft)	13,035	4	25.0	2,607	717			6
	NG Pipelines DWR	Length (ft)	1,966	4	0.0	374	0			0
	PBSJ Gas Oil Wells	Count	1	4	-	0	0			0
	Petr Pipelines DWR	Length (ft)	2,638	4	0.0	554	0			0
	Rail HAZUS SDURS	Length (ft)	2,059	4	25.0	587	161			1
	Residential - Duplex	Count	13	4	28.5	6,294	2,169			14
	Residential - Manufactured Housing	Count	3	4	100.0	113	111			24
	Residential - Single Family Dwelling	Count	193	4	29.3	51,100	17,894			14
	Residential - Triplex-Quads	Count	10	4	28.5	4,742	1,634			14
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	4	28.5	717	247			14
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	4	28.5	78	27			14
	Sewage Treat	Count	3	4	15.0	262,500	43,313			6
	Transmission Line	Length (ft)	3,814	4	-	939	0	69,663	337,147	0
SM-132	PBSJ Gas Oil Wells	Count	1	9	-	0	0			0
	Residential - Single Family Dwelling	Count	2	9	43.6	525	277	277	525	21
SM-133	PBSJ Gas Oil Production Fields	Area (Acres)	204	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	9	2	-	0	0	0	0	0
SM-134	PBSJ Gas Oil Production Fields	Area (Acres)	1	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	1	6	-	0	0	0	0	0
SM-198	Delta Roads PBSJ Minor Roads	Length (ft)	857	8	25.0	171	47			6
	NG Pipelines DWR	Length (ft)	4,304	9	0.0	818	0			0
	PBSJ Gas Oil Wells	Count	3	4	-	0	0			0
	Petr Pipelines DWR	Length (ft)	5,048	9	0.0	1,060	0			0
	Rail HAZUS SDURS	Length (ft)	422	9	25.0	120	33			1
	Residential - Single Family Dwelling	Count	6	9	43.6	1,703	900			21
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	9	45.5	54	29			22
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	9	45.5	57	31	1,040	3,984	22
SM-199	Communication HAZUS SDURS	Count	2	6	100.0	236	260			18
	Delta Roads PBSJ Minor Roads	Length (ft)	3,450	7	25.0	690	190			6
	Residential - Single Family Dwelling	Count	3	7	39.1	990	475			19
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	7	43.0	30	15			21
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	7	43.0	30	15	955	1,976	21
SM-202	Residential - Single Family Dwelling	Count	2	5	32.6	531	210	210	531	16
SM-39	Delta Roads PBSJ Minor Roads	Length (ft)	9,423	3	25.0	1,885	518			6
	Transmission Line	Length (ft)	2,256	3	-	555	0	518	2,440	0
SM-40	Delta Roads PBSJ Minor Roads	Length (ft)	7,779	5	25.0	1,556	428	428	1,556	6

SM-41	Commercial- Professional/ Technical Serv	Count	1	4	28.0	4	2			10
	Commercial- Retail Trade	Count	1	4	18.0	72	36			6
	Delta Roads PBSJ Minor Roads	Length (ft)	218	4	25.0	44	12			6
	Petr Pipelines DWR	Length (ft)	9,239	4	0.0	1,940	0			0
	Rail HAZUS SDURS	Length (ft)	5,523	4	25.0	1,574	433	483	3,634	1
SM-42	PBSJ Substation	Count	1	5	25.0	1,000	275			0
	Transmission Line	Length (ft)	3,061	4	-	754	0	275	1,754	0
SM-43	PBSJ Gas Oil Production Fields	Area (Acres)	95	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	6	3	-	0	0			0
	Residential - Single Family Dwelling	Count	2	6	37.0	504	225	225	504	18
SM-44	Delta Roads PBSJ Minor Roads	Length (ft)	10,951	3	25.0	2,190	602			6
	Residential - Single Family Dwelling	Count	4	4	25.8	1,330	402			12
	Transmission Line	Length (ft)	2,710	3	-	667	0	1,005	4,187	0
SM-46	Commercial- Retail Trade	Count	1	4	16.0	6	3			6
	Delta Roads PBSJ Minor Roads	Length (ft)	2,339	4	25.0	468	129	132	474	6
SM-47	Solid Waste Facilities	Count	1	3	25.0	0	0	0	0	0
SM-48	Commercial - Entertainment and Recreation	Count	1	4	12.0	1,572	700			0
	Commercial- Professional/ Technical Serv	Count	1	4	22.0	1,832	917			8
	Commercial- Retail Trade	Count	2	4	16.0	32,602	15,241			6
	PBSJ Gas Oil Wells	Count	2	5	-	0	0			0
	Petr Pipelines DWR	Length (ft)	21,217	4	0.0	4,456	0			0
	Rail HAZUS SDURS	Length (ft)	10,409	4	25.0	2,967	816	17,674	43,428	1
SM-49	Commercial- Professional/ Technical Serv	Count	2	5	28.0	168	95			10
	Commercial- Retail Trade	Count	2	5	18.0	340	174			6
	Delta Roads PBSJ Minor Roads	Length (ft)	3,423	5	25.0	685	188			6
	Petr Pipelines DWR	Length (ft)	2,421	5	0.0	508	0			0
	Rail HAZUS SDURS	Length (ft)	4,398	5	25.0	1,253	345			1
	Residential - Single Family Dwelling	Count	3	5	29.3	1,091	382	1,184	4,046	14
SM-51	PBSJ Gas Oil Production Fields	Area (Acres)	3	6	0.0	0	0	0	0	0
SM-52	Commercial- Retail Trade	Count	2	6	20.0	220	119			7
	Delta Roads PBSJ Minor Roads	Length (ft)	2,395	6	25.0	479	132			6
	PBSJ Gas Oil Production Fields	Area (Acres)	170	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	6	6	-	0	0			0
	Residential - Single Family Dwelling	Count	3	6	32.6	682	270			16
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	6	32.0	6	2			15
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	6	32.0	9	4	526	1,396	15
SM-53	Commercial- Retail Trade	Count	1	1	9.0	28	5			3
	Delta Roads PBSJ Minor Roads	Length (ft)	53	1	25.0	11	3			6
	PBSJ Gas Oil Production Fields	Area (Acres)	97	1	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	1	2	-	0	0			0
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	1	15.5	2	0			7
	Residential- Multi- Dwellings- 20 to 49 unit	Count	1	1	15.5	2	0	8	42	7
SM-54	Delta Roads PBSJ Minor Roads	Length (ft)	4,280	4	25.0	856	235			6
	PBSJ Gas Oil Wells	Count	3	4	-	0	0			0
	Petr Pipelines DWR	Length (ft)	118	4	0.0	25	0			0
	Rail HAZUS SDURS	Length (ft)	3,031	4	25.0	864	238	473	1,745	1
SM-55	Delta Roads PBSJ Minor Roads	Length (ft)	18,624	8	25.0	3,725	1,024			6
	NG Pipelines DWR	Length (ft)	4,433	8	0.0	842	0			0
	Petr Pipelines DWR	Length (ft)	4,424	8	0.0	929	0			0

	Residential - Single Family Dwelling	Count	3	8	39.1	848	407	1,431	6,344	19
SM-56	Delta Roads PBSJ Minor Roads	Length (ft)	7,016	5	25.0	1,403	386			6
	NG Pipelines DWR	Length (ft)	5,029	5	0.0	956	0			0
	PBSJ Gas Oil Wells	Count	2	6	-	0	0			0
	Petr Pipelines DWR	Length (ft)	3,111	5	0.0	653	0			0
	Residential - Single Family Dwelling	Count	4	5	29.3	1,426	499	885	4,438	14
SM-57	Delta Roads PBSJ Minor Roads	Length (ft)	5,910	3	25.0	1,182	325			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	2	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	536	4	0.0	102	0			0
	Transmission Line	Length (ft)	5,895	3	-	1,451	0	325	4,735	0
SM-58	Delta Roads PBSJ Minor Roads	Length (ft)	3,841	7	25.0	768	211	211	768	6
SM-59	Delta Roads PBSJ Major Roads	Length (ft)	653	4	25.0	215	59			6
	Hwy HAZUS SDURS	Length (ft)	632	4	25.0	209	57			3
	PBSJ Gas Oil Production Fields	Area (Acres)	271	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	8	3	-	0	0			0
	Residential - Single Family Dwelling	Count	2	4	29.3	351	123	240	775	14
SM-60	Commercial - Entertainment and Recreation	Count	2	3	12.0	2,748	1,118			0
	Commercial- Professional/ Technical Serv	Count	2	3	22.0	3,880	1,793			8
	Commercial- Retail Trade	Count	2	3	16.0	1,384	594			6
	Delta Roads PBSJ Minor Roads	Length (ft)	1,043	3	25.0	209	57			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	6	0.0	2,000	0	3,562	10,221	0
SM-84	Commercial- Retail Trade	Count	2	7	26.0	324	189			9
	Delta Roads PBSJ Minor Roads	Length (ft)	74,034	7	25.0	14,807	4,072			6
	PBSJ Gas Oil Production Fields	Area (Acres)	10	7	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	9	4	-	0	0			0
	Residential - Single Family Dwelling	Count	15	7	39.1	4,770	2,289	6,549	19,901	19
SM-85-Grizzly_Island	Delta Roads PBSJ Minor Roads	Length (ft)	58,491	5	25.0	11,698	3,217			6
	NG Pipelines DWR	Length (ft)	30,135	5	0.0	5,726	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	190	5	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	12	5	-	0	0			0
	Petr Pipelines DWR	Length (ft)	2,326	5	0.0	488	0			0
	Residential - Single Family Dwelling	Count	7	5	32.6	2,360	933	4,150	20,273	16
Smith Tract	Residential - Single Family Dwelling	Count	1	1	16.4	237	44	44	237	8
Staten_Island	Commercial- Retail Trade	Count	3	23	100.0	738	812			18
	Delta Roads PBSJ Major Roads	Length (ft)	4,422	22	25.0	1,459	401			6
	Delta Roads PBSJ Minor Roads	Length (ft)	132,282	22	25.0	26,456	7,276			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	20	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	26,159	23	0.0	6,801	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,637	22	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	34	20	-	0	0			0
	Residential - Manufactured Housing	Count	21	23	100.0	986	1,023			24
	Residential - Single Family Dwelling	Count	9	23	100.0	1,553	1,651	11,162	39,993	24
Sutter Island	Delta Roads PBSJ Major Roads	Length (ft)	3,515	9	25.0	1,160	319			6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,251	9	25.0	12,650	3,479			6
	Hwy HAZUS SDURS	Length (ft)	5,146	9	25.0	1,698	467			3
	PBSJ Gas Oil Wells	Count	5	6	-	0	0			0
	Residential - Manufactured Housing	Count	2	9	100.0	60	62			24
	Residential - Single Family Dwelling	Count	38	9	43.6	10,256	5,417			21
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	9	45.5	510	276	10,020	26,334	22

Terminous_Tract 1	bridges not in HAZUS	Count	1	1	0.0	1,000	0	2,066	8,202	0
	Commercial- Professional/ Technical Serv	Count	4	3	16.0	16	6			6
	Commercial- Retail Trade	Count	4	3	14.0	40	15			5
	Delta Roads PBSJ Minor Roads	Length (ft)	5,050	3	25.0	1,010	278			6
	PBSJ Gas Oil Production Fields	Area (Acres)	28	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	2	3	-	0	0			0
	Residential - Manufactured Housing	Count	8	3	100.0	552	520			24
	Residential - Single Family Dwelling	Count	4	3	20.8	864	209			10
	Schools_HAZUS_SDURS	Count	4	1	5.0	4,720	1,038			2
Terminous_Tract 2	Agriculture	Count	5	18	100.0	11,350	10,737	190,513	251,802	18
	Boatlaunch	Count	5	20	100.0	500	550			0
	Commercial - Wholesale Trade	Count	5	18	100.0	20,310	22,341			18
	Commercial- Professional/ Technical Serv	Count	5	18	100.0	860	946			18
	Commercial- Retail Trade	Count	5	18	100.0	6,410	7,051			18
	Delta Roads PBSJ Major Roads	Length (ft)	3,598	18	25.0	1,187	327			6
	Delta Roads PBSJ Minor Roads	Length (ft)	419,694	18	25.0	83,939	23,083			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	4	0.0	2,000	0			0
	Hwy HAZUS SDURS	Length (ft)	24,236	18	25.0	7,998	2,199			3
	PBSJ Cell Towers	Count	1	21	-	250	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	655	18	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	21	17	-	0	0			0
	Residential - Duplex	Count	9	18	100.0	3,848	4,091			24
	Residential - Manufactured Housing	Count	859	18	100.0	43,998	45,655			24
	Residential - Single Family Dwelling	Count	337	18	100.0	69,152	73,532			24
Terminous_Tract 3	Delta Roads PBSJ Minor Roads	Length (ft)	1,060	3	25.0	212	58	2,022	4,050	6
	Residential - Manufactured Housing	Count	30	3	100.0	1,479	1,393			24
	Residential - Single Family Dwelling	Count	13	3	20.8	2,360	570			10
Twitchell_Island	Delta Roads PBSJ Minor Roads	Length (ft)	42,409	21	25.0	8,482	2,332	14,925	22,405	6
	NG Pipelines DWR	Length (ft)	8,804	21	0.0	2,025	0			0
	NG Wells DWR Not in PBSJ	Count	1	25	-	0	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,198	21	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	35	19	-	0	0			0
	Residential - Duplex	Count	2	21	100.0	792	842			24
	Residential - Manufactured Housing	Count	45	21	100.0	2,324	2,411			24
	Residential - Single Family Dwelling	Count	39	21	100.0	8,054	8,564			24
	Residential - Triplex-Quads	Count	2	21	100.0	588	625			24
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	21	100.0	141	150			24
Tyler_Island 2	Airports_HAZUS_SDURS	Count	1	15	25.0	6,431	1,769	26,908	92,866	3
	Delta Roads PBSJ Major Roads	Length (ft)	5,160	19	25.0	1,703	468			6
	Delta Roads PBSJ Minor Roads	Length (ft)	167,780	19	25.0	33,556	9,228			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	12	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	35,510	19	0.0	7,457	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	4,237	19	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	96	18	-	0	0			0
	Residential - Manufactured Housing	Count	2	19	100.0	245	254			24
	Residential - Single Family Dwelling	Count	17	19	100.0	4,800	5,104			24
	Runway_HAZUS_SDURS	Count	1	3	25.0	36,674	10,085			0
	Solid_Waste_Facilities	Count	1	3	25.0	0	0			0
Union_Island 1	Dams_HAZUS_SDURS	Count	1	10	0.0	0	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	38,706	9	25.0	12,773	3,513			6

	Delta Roads PBSJ Minor Roads	Length (ft)	340,818	9	25.0	68,164	18,745	58,277	205,697	6
	NG Pipelines DWR	Length (ft)	53,023	9	0.0	10,074	0			0
	PBSJ Cell Towers	Count	1	2	-	250	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	1,773	9	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	32	4	-	0	0			0
	Residential - Duplex	Count	7	9	45.5	2,807	1,521			22
	Residential - Institutional Dormitory	Count	9	9	20.0	51,411	18,248			10
	Residential - Manufactured Housing	Count	35	9	100.0	1,493	1,544			24
	Residential - Single Family Dwelling	Count	101	9	43.6	24,785	13,091			21
	Schools HAZUS SDURS	Count	3	5	9.0	3,540	1,616			3
	Transmission Line	Length (ft)	123,469	9	-	30,400	0			0
Union_Island 4	Delta Roads PBSJ Minor Roads	Length (ft)	113	8	25.0	23	6	6	23	6
	PBSJ Gas Oil Production Fields	Area (Acres)	1	3	0.0	0	0			0
Upper_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	4,078	4	25.0	816	224	428	3,031	6
	NG Pipelines DWR	Length (ft)	2,484	4	0.0	472	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	230	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	2	-	0	0			0
	Residential - Single Family Dwelling	Count	3	4	25.8	675	204			12
	Transmission Line	Length (ft)	4,340	4	-	1,069	0			0
Van_Sickle_Island	PBSJ Gas Oil Production Fields	Area (Acres)	294	7	0.0	0	0	16,889	100,810	0
	PBSJ Gas Oil Wells	Count	16	6	-	0	0			0
	Residential - Single Family Dwelling	Count	3	7	39.1	810	389			19
	Sewage Treat	Count	1	6	15.0	100,000	16,500			6
Veale_Tract 1	Commercial- Professional/ Technical Serv	Count	1	9	47.0	270	189	6,286	17,156	17
	Commercial- Retail Trade	Count	1	9	34.0	84	53			12
	Delta Roads PBSJ Minor Roads	Length (ft)	5,221	9	25.0	1,044	287			6
	PBSJ Gas Oil Production Fields	Area (Acres)	86	9	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	9	-	0	0			0
	Residential - Manufactured Housing	Count	5	9	100.0	266	275			24
	Residential - Single Family Dwelling	Count	31	9	46.6	9,720	5,483			22
	Transmission Line	Length (ft)	17,928	9	-	5,772	0			0
Veale_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	1,397	3	25.0	279	77	24,633	109,761	6
	NG Pipelines DWR	Length (ft)	8	3	0.0	2	0			0
	Residential - Institutional Dormitory	Count	20	3	14.0	99,360	21,495			7
	Residential - Single Family Dwelling	Count	39	3	25.8	10,121	3,061			12
Venice_Island	Delta Roads PBSJ Minor Roads	Length (ft)	66,239	27	25.0	13,248	3,643	3,705	13,308	6
	PBSJ Gas Oil Wells	Count	4	28	-	0	0			0
	Residential - Manufactured Housing	Count	2	27	100.0	60	62			24
Victoria_Island	Delta Roads PBSJ Minor Roads	Length (ft)	67,467	18	25.0	13,493	3,711	37,781	57,089	6
	Hwy HAZUS SDURS	Length (ft)	23,053	4	25	7,607	2,092			3
	NG Pipelines DWR	Length (ft)	9,171	17	0.0	1,742	0			0
	PBSJ Gas Oil Wells	Count	2	18	-	0	0			0
	Residential - Institutional Dormitory	Count	5	17	100.0	28,835	30,661			24
	Residential - Manufactured Housing	Count	1	17	100.0	45	47			24
	Residential - Single Family Dwelling	Count	3	17	100.0	1,196	1,271			24
	Transmission Line	Length (ft)	12,954	18	-	4,171	0			0
Walnut_Grove	Commercial- Professional/ Technical Serv	Count	2	9	47.0	1,108	774			17
	Commercial- Retail Trade	Count	2	9	34.0	576	361			12
	Communication HAZUS SDURS	Count	5	3	0.0	590	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	3,282	10	25.0	1,083	298			6

Water Zone 1	Delta Roads PBSJ Minor Roads	Length (ft)	34,909	10	25.0	6,982	1,920	39,963	78,533	6
	hc ambulatory	Count	2	3	12.0	0	0			4
	Hwy Bridge HAZUS SDURS	Length (ft)	2	3	0.0	4,000	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	286	10	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	9	-	0	0			0
	Residential - Duplex	Count	21	9	48.0	8,915	5,119			23
	Residential - Manufactured Housing	Count	11	9	100.0	653	675			24
	Residential - Single Family Dwelling	Count	205	9	46.6	54,627	30,816			22
	Boatlaunch	Count	10	2	100.0	1,000	1,100			0
	Commercial- Professional/ Technical Serv	Count	2	12	100.0	4,400	4,356			18
	Commercial- Retail Trade	Count	2	12	47.0	4,520	3,157			17
	Delta Roads PBSJ Major Roads	Length (ft)	24,292	3	25.0	8,016	2,204			6
	Delta Roads PBSJ Minor Roads	Length (ft)	203,862	3	25.0	40,772	11,212			6
	Fire Stations HAZUS SDURS	Count	2	1	7.0	3,540	927			3
	Hwy Bridge HAZUS SDURS	Length (ft)	2	1	0.0	4,000	0			0
	Hwy HAZUS SDURS	Length (ft)	71,412	3	25.0	23,566	6,481			3
	NG Pipelines DWR	Length (ft)	56,787	3	0.0	15,900	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,533	3	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	26	2	-	0	0			0
	PBSJ Substation	Count	6	3	25.0	6,000	1,650			0
	Petr Pipelines DWR	Length (ft)	460	3	0.0	97	0			0
Water Zone 2	Police Station HAZUS SDURS	Count	2	1	7.0	8,260	2,162	50,379	174,585	3
	Residential - Manufactured Housing	Count	76	3	100.0	4,113	3,982			24
	Residential - Single Family Dwelling	Count	154	3	25.8	38,773	11,729			12
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	12	100.0	762	810			24
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	12	100.0	84	89			24
	Schools HAZUS SDURS	Count	2	1	5.0	2,360	519			2
	Transmission Line	Length (ft)	34,201	3	-	8,421	0			0
	Boatlaunch	Count	12	2	100.0	1,200	1,320			0
	bridges not in HAZUS	Count	5	7	0.0	5,000	0			0
	Commercial- Professional/ Technical Serv	Count	2	10	100.0	1,752	1,734			18
	Commercial- Retail Trade	Count	2	10	38.0	408	265			14
	Delta Roads PBSJ Minor Roads	Length (ft)	61,297	6	25.0	12,259	3,371			6
	gas pipeline kinder morgan LS 9	Length (ft)	818	6	0.0	172	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	4	3	0.0	8,000	0			0
	Hwy HAZUS SDURS	Length (ft)	11,761	6	25.0	3,881	1,067			3
	NG Pipelines DWR	Length (ft)	36,582	6	0.0	6,951	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2,482	6	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	7,820	4	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	2,615	6	0	13,075	0			0
	PBSJ Substation	Count	2	14	25.0	2,000	550			0
	Petr Pipelines DWR	Length (ft)	83,727	10	0.0	17,583	0			0
	Ports HAZUS SDURS	Count	18	6	0.0	46,303	0			0
	Rail Bridge HAZUS SDURS	Count	2	3	25.0	2,000	550			1
	Rail HAZUS SDURS	Length (ft)	29,631	17	25.0	8,445	2,322			1
	Residential - Institutional Dormitory	Count	2	9	23.0	13,311	5,203			11
	Residential - Manufactured Housing	Count	33	6	100.0	1,858	1,887			24
	Residential - Single Family Dwelling	Count	247	6	32.6	79,417	31,406			16
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	10	49.5	651	389			24
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	10	49.5	1,353	809			24

Water Zone 3	Sewage Treat	Count	5	7	15.0	1,037,500	171,188	222,061	1,271,511	6
	Transmission Line	Length (ft)	34,086	6	-	8,392	0			0
	air_trans	Count	2	1	-	0	0			0
	Boatlaunch	Count	9	2	100.0	900	990			0
	bridges not in HAZUS	Count	2	2	0.0	2,000	0			0
	Commercial- Professional/ Technical Serv	Count	2	10	100.0	4,096	4,055			18
	Commercial- Retail Trade	Count	2	10	38.0	972	631			14
	Delta_Roads PBSJ Major Roads	Length (ft)	4,560	2	25.0	1,505	414			6
	Delta_Roads PBSJ Minor Roads	Length (ft)	77,385	2	25.0	15,477	4,256			6
	Hwy Bridge HAZUS SDURS	Length (ft)	3	1	0.0	6,000	0			0
	Hwy HAZUS SDURS	Length (ft)	1,946	3	25.0	642	177			3
	NG Pipelines DWR	Length (ft)	6,940	3	0.0	1,596	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	739	2	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	5	2	-	0	0			0
	Residential - Duplex	Count	2	3	22.5	1,575	401			11
	Residential - Manufactured Housing	Count	69	3	100.0	3,770	3,553			24
	Residential - Single Family Dwelling	Count	66	3	20.8	15,468	3,738			10
	Residential - Triplex-Quads	Count	2	3	22.5	711	181			11
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	10	49.5	174	104			24
	Sewage Treat	Count	2	1	15.0	170,000	28,050			6
	Transmission Line	Length (ft)	5,264	2	-	1,296	0			0
	water_trans	Count	2	1	0.0	0	0			0
Water Zone 4	Boatlaunch	Count	4	2	100.0	400	440	46,548	226,182	0
	Commercial - Entertainment and Recreation	Count	2	3	12.0	2,860	1,164			0
	Commercial - Personal and Repair Service	Count	5	3	13.0	11,490	4,740			5
	Commercial - Wholesale Trade	Count	2	3	11.0	6,236	2,504			4
	Commercial- Professional/ Technical Serv	Count	2	10	47.0	14,496	10,125			17
	Commercial- Retail Trade	Count	2	10	34.0	2,564	1,608			12
	Delta_Roads PBSJ Minor Roads	Length (ft)	90,083	4	25.0	18,017	4,955			6
	gas pipeline kinder morgan LS 9	Length (ft)	2,097	4	0.0	440	0			0
	Hwy Bridge HAZUS SDURS	Length (ft)	3	2	0.0	6,000	0			0
	Hwy HAZUS SDURS	Length (ft)	7,444	3	25.0	2,457	676			3
	NG Pipelines DWR	Length (ft)	21,265	3	0.0	4,040	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	134	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	7,820	4	-	0	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	8,378	3	0	41,890	0			0
	Rail HAZUS SDURS	Length (ft)	2,956	11	25.0	842	232			1
	Residential - Manufactured Housing	Count	4	3	100.0	326	316			24
	Residential - Single Family Dwelling	Count	67	6	37.0	21,612	9,652			18
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	10	48.0	1,230	706			23
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	10	48.0	540	310			23
	Transmission Line	Length (ft)	8,997	3	-	2,897	0			0
Water Zone 5	bridges not in HAZUS	Count	2	17	0.0	2,000	0	37,426	138,337	0
	Commercial- Professional/ Technical Serv	Count	2	12	100.0	52	51			18
	Commercial- Retail Trade	Count	2	12	42.0	1,488	998			15
	Delta_Roads PBSJ Major Roads	Length (ft)	994	9	25.0	328	90			6
	Delta_Roads PBSJ Minor Roads	Length (ft)	13,198	1	25.0	2,640	726			6
	Hwy Bridge HAZUS SDURS	Length (ft)	1	1	0.0	2,000	0			0
	NG Pipelines DWR	Length (ft)	1,155	1	0.0	375	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	2	1	0.0	0	0			0

	Petr Pipelines DWR	Length (ft)	333	1	0.0	70	0			0
	Rail HAZUS SDURS	Length (ft)	453	1	25.0	129	36			1
	Residential - Manufactured Housing	Count	3	1	44.0	180	76			21
	Residential - Single Family Dwelling	Count	51	1	16.4	17,741	3,262			8
	Transmission Line	Length (ft)	3,234	1	-	796	0	5,240	27,800	0
Webb_Tract	NG Pipelines DWR	Length (ft)	1,292	24	0.0	245	0			0
	PBSJ Gas Oil Production Fields	Area (Acres)	83	24	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	18	21	-	0	0			0
	Residential - Single Family Dwelling	Count	1	24	100.0	171	182	182	416	24
Woodward_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,148	20	25.0	5,630	1,548			6
	gas pipeline kinder morgan LS 9	Length (ft)	7,820	20	0.0	1,642	0			0
	PBSJ Mokelumne Aqueduct	Length (ft)	23,350	20	-	116,750	9,760			1
	Rail HAZUS SDURS	Length (ft)	8,034	4	25	2,290	630	11,938	126,311	1
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	9,702	7	25.0	1,940	534			6
	PBSJ Gas Oil Wells	Count	2	18	-	0	0			0
	Residential - Single Family Dwelling	Count	4	10	48.6	1,277	755			23
	Residential- Multi- Dwellings- 10 to 19 unit	Count	1	16	100.0	81	86			24
	Residential- Multi- Dwellings- 20 to 49 unit	Count	1	16	100.0	27	29			24
	Transmission Line	Length (ft)	53,221	14	-	13,104	0	1,403	16,429	0
Yolo_Bypass	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	983	2	25.0	197	54	54	197	6
Zone 14	NG Pipelines DWR	Length (ft)	2,273	10	0.0	432	0			0
	PBSJ Gas Oil Wells	Count	1	10	-	0	0	0	432	0
Zone 155	Transmission Line	Length (ft)	769	5	-	189	0	0	189	0
Zone 162	Delta Roads PBSJ Minor Roads	Length (ft)	3,564	5	25.0	713	196			6
	NG Pipelines DWR	Length (ft)	1,545	5	0.0	294	0			0
	Residential - Single Family Dwelling	Count	6	5	29.3	1,714	600	796	2,720	14
Zone 186	Transmission Line	Length (ft)	13,335	5	0.0	3,283	0	0	3,283	0
Zone 206	bridges not in HAZUS	Count	1	2	0.0	1,000	0			0
	Commercial - Entertainment and Recreation	Count	1	4	14.0	1,868	884			0
	Commercial - Personal and Repair Service	Count	1	4	16.0	1,908	923			6
	Commercial - Wholesale Trade	Count	1	4	13.0	3,678	1,719			5
	Commercial- Professional/ Technical Serv	Count	1	4	28.0	1,820	1,001			10
	Commercial- Retail Trade	Count	1	4	18.0	948	469			6
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	7,934	4	25.0	2,618	720			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	484	4	25.0	97	27			6
	PBSJ Gas Oil Production Fields	Area (Acres)	4	4	0.0	0	0			0
	PBSJ Gas Oil Wells	Count	3	4	-	0	0			0
	Petr Pipelines DWR	Length (ft)	31,152	4	0.0	6,542	0			0
	Rail HAZUS SDURS	Length (ft)	7,825	4	25.0	2,230	613			1
	Residential - Institutional Dormitory	Count	1	4	15.0	2,568	631	6,988	25,277	7
	Delta Roads PBSJ Minor Roads	Length (ft)	1,856	5	25.0	371	102			6
	Petr Pipelines DWR	Length (ft)	1,906	5	0.0	400	0			0
	Rail HAZUS SDURS	Length (ft)	4,131	5	25.0	1,177	324	426	1,949	1
Zone 207	Residential - Single Family Dwelling	Count	3	1	16.4	968	178	178	968	8
Zone 31	Residential - Single Family Dwelling	Count	2	1	16.4	489	90	90	489	8
Zone 33	Residential - Single Family Dwelling	Count	2	2	20.8	810	196			10
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	2	22.5	12	3			11
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	2	22.5	9	2			11
	Solid_Waste_Facilities	Count	2	1	25.0	0	0	201	831	0

Zone 37	Commercial - Entertainment and Recreation	Count	3	6	16.0	4,338	2,267			0
	Commercial- Professional/ Technical Services	Count	3	6	35.0	816	512			13
	Commercial- Retail Trade	Count	3	6	20.0	858	467			7
	Delta Roads PBSJ Minor Roads	Length (ft)	501	6	25.0	100	28			6
	Health Ambulatory	Count	3	1	11.0	0	0			4
	Hwy HAZUS SDURS	Length (ft)	61	6	25.0	20	6			3
	Petr Pipelines DWR	Length (ft)	487	6	0.0	102	0			0
	Rail HAZUS SDURS	Length (ft)	496	6	25.0	141	39			1
	Residential - Manufactured Housing	Count	7	6	100.0	399	407			24
	Residential - Single Family Dwelling	Count	10	6	32.6	1,830	759			16
	Residential- Multi- Dwellings- 10 to 19 unit	Count	3	6	32.0	90	37			15
	Residential- Multi- Dwellings- 20 to 49 unit	Count	3	6	32.0	540	221	4,741	9,235	15
Zone 38	Commercial- Professional/ Technical Services	Count	2	2	16.0	84	27			6
	Commercial- Retail Trade	Count	2	2	14.0	60	18			5
	Delta Roads PBSJ Minor Roads	Length (ft)	516	2	25.0	103	28			6
	Hwy HAZUS SDURS	Length (ft)	95	2	25.0	31	9			3
	Petr Pipelines DWR	Length (ft)	1,314	2	0.0	276	0			0
	Rail HAZUS SDURS	Length (ft)	1,560	2	25.0	445	122			1
	Residential- Multi- Dwellings- 10 to 19 unit	Count	2	2	22.5	3	1			11
	Residential- Multi- Dwellings- 20 to 49 unit	Count	2	2	22.5	12	3	208	1,014	11
Zone 64	PBSJ Gas Oil Production Fields	Area (Acres)	1	1	0.0	0	0			0
	Residential - Single Family Dwelling	Count	3	1	16.4	882	162	162	882	8
Zone 90	Hazmat HAZUS SDURS	Count	3	1	-	0	0			0
	Petr Pipelines DWR	Length (ft)	27	3	0.0	6	0			0
	Rail HAZUS SDURS	Length (ft)	14	3	25.0	4	1	1	10	1

Table 7- 4b: Estimate Summary of Asset Cost Damage by Island - Mean Higher High Water - (2050)

Island Name	Total Repair Costs (\$1,000)	Content Value (\$1,000)	Percent of Value Damaged (\$1,000)
Bacon Island	31,587	43,917	72
Bethel Island	418,770	439,732	95
Bishop Tract	3,365	18,249	18
Bixler Tract	380	1,260	30
Bouldin Island	14,359	25,898	55
Brack Tract	5,608	19,967	28
Bradford Island	11,554	21,630	53
Brannan-Andrus Island	182,948	264,858	69
Browns Island	0	0	0
Byron Tract 1	37,596	218,370	17
Byron Tract 2	4,646	23,429	20
Cache Haas Tract 1	4,419	21,331	21
Cache Haas Tract 2	1,234	4,215	29
Canal Ranch	15,430	24,540	63
Chippis Island	0	0	0
Clifton Court Forebay Water	717	4,206	17
Coney Island	23,296	21,921	106
Deadhorse Island	281	998	28
Decker Island	0	1,536	0
Egbert Tract	8,559	35,942	24
Elk Grove 1	69	252	28
Empire Tract	10,855	30,527	36
Fabian Tract	26,207	85,513	31
Fay Island	6	23	28
Glanville Tract	1,341	6,497	21
Grand Island	193,064	253,981	76
Hastings Tract 1	3	6	47
Hastings Tract 2	2,742	12,183	23
Holland Land	6,187	22,496	28
Holland Tract	6,432	15,788	41
Honker Bay Club	317	2,645	12
Hotchkiss Tract 1	94,936	195,063	49
Hotchkiss Tract 2	379	1,828	21
Jersey Island	3,266	24,615	13
Jones Tract-Upper and Lower	89,642	517,823	17
King Island	140,702	158,332	89
Libby McNeil Tract 1	11,348	27,884	41
Libby McNeil Tract 2	716	1,848	39
Liberte Island	1,968	14,599	13
Lincoln Village Tract	5,195	18,902	27
Lisbon District	3,653	13,140	28
Little Holland Tract	0	0	0
Little Egbert Tract	4,938	12,608	39
Lower Roberts Island	989	2,933	34
Mandeville Island	1,433	5,213	28
McCormack Williamson Tract	546	3,115	18
McDonald Tract	21,141	36,246	58
McMullin Ranch-River Junction Tract	2,092	7,607	28
Medford Island	4,637	8,559	54
Merritt Island	7,818	23,512	33
Middle Roberts Island	54,828	542,743	10
Netherlands 2	35,521	117,087	30
New Hope Tract	26,342	63,054	42
Orwood Tract	52,616	247,313	21
Palm Tract	6,973	22,563	31
Peter Pocket	619	2,575	24
Pico Naglee Tract	11,447	40,759	28
Pierson Tract	42,381	92,760	46
Pittsburg	7,707	35,127	22
Prospect Island	545	1,788	30
Quimby Island	134	1,126	12
Rindge Tract	23,783	72,283	33
Rio Blanco Tract	206	5,065	4
Roberts Island	4,386	15,049	29

Rough and Ready Island	19,537	50,514	39
Ryer Island	24,503	42,835	57
Sargent_Barnhart_Tract 2	327,072	696,609	47
Sargent_Barnhart_Tract 3	5,893	33,574	18
Schafter-Pintail Tract	2,265	6,808	33
Sherman_Island	31,400	127,950	25
Shima_Tract	286	7,177	4
Shin_Kee_Tract	82	807	10
Simmons-Wheeler_Island	299	756	40
SM-123	908	5,447	17
SM-124	69,663	337,147	21
SM-132	277	525	53
SM-133	0	0	0
SM-134	0	0	0
SM-198	1,040	3,984	26
SM-199	955	1,976	48
SM-202	210	531	40
SM-39	518	2,440	21
SM-40	428	1,556	28
SM-41	483	3,634	13
SM-42	275	1,754	16
SM-43	225	504	45
SM-44	1,005	4,187	24
SM-46	132	474	28
SM-47	0	0	0
SM-48	17,674	43,428	41
SM-49	1,184	4,046	29
SM-51	0	0	0
SM-52	526	1,396	38
SM-53	8	42	19
SM-54	473	1,745	27
SM-55	1,431	6,344	23
SM-56	885	4,438	20
SM-57	325	4,735	7
SM-58	211	768	28
SM-59	240	775	31
SM-60	3,562	10,221	35
SM-84	6,549	19,901	33
SM-85-Grizzly_Island	4,150	20,273	20
Smith_Tract	44	237	18
Staten_Island	11,162	39,993	28
Sutter Island	10,020	26,334	38
Terminus Tract 1	2,066	8,202	25
Terminus Tract 2	190,513	251,802	76
Terminus Tract 3	2,022	4,050	50
Twitchell_Island	14,925	22,405	67
Tyler_Island 2	26,908	92,866	29
Union_Island 1	58,277	205,697	28
Union_Island 4	6	23	28
Upper_Roberts_Island	428	3,031	14
Van_Sickle_Island	16,889	100,810	17
Veale_Tract 1	6,286	17,156	37
Veale_Tract 2	24,633	109,761	22
Venice_Island	3,705	13,308	28
Victoria_Island	37,781	57,089	66
Walnut_Grove	39,963	78,533	51
Water Zone 1	50,379	174,585	29
Water Zone 2	222,061	1,271,511	17
Water Zone 3	46,548	226,182	21
Water Zone 4	37,426	138,337	27
Water Zone 5	5,240	27,800	19
Webb_Tract	182	416	44
Woodward_Island	11,938	126,311	9
Wright-Elmwood_Tract	1,403	16,429	9
Yolo_Bypass	54	197	28
Zone 14	0	432	0
Zone 155	0	189	0
Zone 162	796	2,720	29
Zone 186	0	3,283	0
Zone 206	6,988	25,277	28

Zone 207	426	1,949	22
Zone 31	178	968	18
Zone 33	90	489	18
Zone 36	201	831	24
Zone 37	4,741	9,235	51
Zone 38	208	1,014	21
Zone 64	162	882	18
Zone 90	1	10	11
TOTAL (\$1,000)	3,034,185	8,464,672	36

Table 7- 5 a: Estimate of Asset Cost Damage and Repair Times- 100-year Flood- 2050

Total Asset Value: \$67.1 Billion

1	2	3	4	5	6	7	8	9	10	11
Island Name	Asset Type	Inventory Unit	Quantity (Expected 2050)	Expected Inundation Depth (2050 Conditions)	Percent Damage	Total Asset Value (Structure + Contents) (\$1,000)	Total Inundation Repair Costs (Structure + Contents + Debris)	Per Island Inundation Repair Costs (\$1000)	Per Island Asset Value (\$1000)	Repair Time (Months)
Bacon_Island	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	37,655	26	25	7,531	2,071	31,587	43,917	6
	gas_oil_wells	Count	8	26	0	0	0			0
	Natural Gas Pipeline	Length (ft)	28,289	26	0	8,628	0			0
	Residential - Institutional and Dormitory	Count	5	26	100	27,758	29,515			24
Bethel_Island	Boatlaunch	Count	6	13	100	600	660	418,770	439,732	0
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	273,225	16	25	54,645	15,027			6
	Gas_Oil_Production_Fields	Area (Acres)	722	16	0	0	0			0
	gas_oil_wells	Count	24	16	0	0	0			0
	Natural Gas Pipeline	Length (ft)	23,384	16	0	4,443	0			0
	Natural Gas Wells	Count	2	18	-	0	0			0
	Residential - Duplex	Count	13	16	100	6,441	6,848			24
	Residential - Manuf. Housing	Count	785	16	100	40,168	41,681			24
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	16	100	2,430	2,584			24
	Residential - Single Family Dwelling	Count	1,206	16	100	331,005	351,969			24
	solid_waste_facilities	Count	2	14	25	0	0			0
	utilities	Count	1	13	-	0	0			0
	water_trans	Count	4	13	-	0	0			0
Bishop_Tract	Boatlaunch	Count	1	11	100	100	110	66,163	141,119	0
	Commercial - Retail Trade	Count	1	11	38	36	23			14
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	2,483	11	25	819	225			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	91,434	11	25	18,287	5,029			6
	Gas_Oil_Production_Fields	Area (Acres)	98	25	0	0	0			0
	gas_oil_wells	Count	1	14	0	0	0			0
	Hwy Bridge HAZUS_SDURS	Count	6	5	25	12,000	3,300			3
	Hwy HAZUS_SDURS	Length (ft)	10,846	11	25	3,579	984			3
	Residential - Manuf. Housing	Count	1	11	100	39	40			24
	Residential - Single Family Dwelling	Count	304	11	49	94,247	55,723			23
	Residential - Triplex-Quads	Count	1	11	50	297	178			24
	substation_ca	Count	2	7	25	2,000	550			0
	transln_ca	Length (ft)	39,459	11	-	9,715	0			0
Bixler_Tract	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	240	6	25	48	13	855	1,933	6
	Gas_Oil_Production_Fields	Area (Acres)	87	6	0	0	0			0
	gas_oil_wells	Count	3	6	0	0	0			0
	Residential - Single Family Dwelling	Count	5	6	37	1,885	842			18
Boggs_Tract	bridges_not_in_HAZUS	Count	4	4	25	4,000	1,100			3
	Commercial - Personal and Repair Servi	Count	2	4	16	5,600	2,710			6
	Commercial - Professional and Technica	Count	2	4	28	39,968	21,982			10
	Commercial - Retail Trade	Count	2	4	18	43,116	21,342			6

	Commercial - Wholesale Trade	Count	23	4	13	106,628	49,849	1,073,264	2,926,466	5
	Delta Roads PBSJ Major Roads	Length (ft)	21,847	4	25	7,210	1,983			6
	Delta Roads PBSJ Minor Roads	Length (ft)	231,689	4	25	46,338	12,743			6
	Elec Power HAZUS SDURS	Count	1	7	100	129,800	142,780			0
	Gas Oil Production Fields	Area (Acres)	68	4	0	0	0			0
	Hazmat HAZUS SDURS	Count	33	7	-	0	0			0
	hc ambulatory	Count	2	4	13	0	0			5
	hc nursing res	Count	2	2	10	0	0			5
	Hwy Bridge HAZUS SDURS	Count	6	6	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	7,385	4	25	2,437	670			3
	Industrial - Heavy	Count	6	4	19	45,835	19,562			7
	Industrial - Light	Count	2	4	22	14,810	6,516			8
	intermodal terminal facilities	Count	9	4	-	0	0			0
	Petroleum Pipelines	Length (ft)	23,797	4	0	4,997	0			0
	pipeline trans	Count	1	6	-	0	0			0
	Port HAZUS SDURS	Count	21	2	0	54,020	0			0
	rail 1000 nodes	Count	18	5	-	0	0			0
	Rail Bridge HAZUS SDURS	Count	4	3	25	4,000	1,100			1
	Rail Facility HAZUS SDRUS	Count	7	2	25	18,007	4,952			0
	Rail HAZUS SDURS	Length (ft)	35,489	4	25	10,114	2,781			1
	Residential - Duplex	Count	61	4	29	27,395	9,442			14
	Residential - Institutional and Dormitory	Count	2	4	15	10,455	2,568			7
	Residential - Manuf. Housing	Count	59	4	100	2,650	2,623			24
	Residential - Single Family Dwelling	Count	4,089	4	29	1,041,665	364,756			14
	Residential - Triplex-Quads	Count	2	4	29	3,165	1,091			14
	Schools HAZUS SDURS	Count	6	1	5	7,080	1,558			2
	sewage treat	Count	2	4	30	1,100,000	363,000			12
	solid waste facilities	Count	2	4	25	0	0			0
	substation ca	Count	1	6	25	1,000	275			0
	tankfarms	Count	9	10	-	27,000	0			0
	utilities	Count	1	15	-	0	0			0
	Waste Water HAZUS SDURS	Count	2	3	20	157,176	34,579			12
	water trans	Count	4	5	-	0	0			0
Bouldin_Island	air trans	Count	1	26	-	0	0			0
	Commercial - Professional/ Technical Se	Count	1	24	100	7,584	8,342			18
	Commercial - Retail Trade	Count	1	24	100	1,188	1,307			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,506	24	25	497	137			6
	Delta Roads PBSJ Minor Roads	Length (ft)	43,282	24	25	8,656	2,381			6
	gas oil wells	Count	17	24	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	24,159	24	25	7,972	2,192			3
	utilities	Count	1	9	-	0	0			0
Brack_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	68,203	17	25	13,641	3,751	14,359	25,898	6
	Gas Oil Production Fields	Area (Acres)	874	18	0	0	0			0
	gas oil wells	Count	19	17	0	0	0			0
	Natural Gas Pipeline	Length (ft)	25,968	17	0	5,973	0			0
	Residential - Manuf. Housing	Count	18	17	100	873	906			24
	Residential - Single Family Dwelling	Count	8	19	100	1,374	1,461			24
Bradford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	57,920	21	25	11,584	3,186	6,118	21,860	6
	gas oil wells	Count	16	22	0	0	0			0
	Natural Gas Pipeline	Length (ft)	7,466	21	0	2,165	0			0
	Natural Gas Wells	Count	6	22	-	0	0			0
	Residential - Duplex	Count	1	21	100	219	233			24
	Residential - Manuf. Housing	Count	9	21	100	444	461			24

	Residential - Single Family Dwelling	Count	27	21	100	7,218	7,675	11,554	21,630	24
Brannan-Andrus Island	air trans	Count	2	10	-	0	0			0
	Boatlaunch	Count	10	9	100	1,000	1,100			0
	Commercial - Entertainment and Recrea	Count	2	23	100	5,984	6,582			18
	Commercial - Professional/ Technical Se	Count	2	23	100	15,264	16,790			18
	Commercial - Retail Trade	Count	2	23	100	10,952	12,047			18
	Delta Roads PBSJ Major Roads	Length (ft)	28,730	23	25	9,481	2,607			6
	Delta Roads PBSJ Minor Roads	Length (ft)	316,305	23	25	63,261	17,397			6
	Gas Oil Production Fields	Area (Acres)	9,133	23	0	0	0			0
	gas oil wells	Count	157	20	0	0	0			0
	hc hospital	Count	2	16	100	0	0			18
	Hwy Bridge HAZUS SDURS	Count	3	8	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	55,613	23	25	18,352	5,047			3
	Natural Gas Pipeline	Length (ft)	75,806	23	0	17,814	0			0
	Natural Gas Wells	Count	86	20	-	0	0			0
	rail 1000 nodes	Count	2	21	-	0	0			0
	Residential - Duplex	Count	8	23	100	5,212	5,542			24
	Residential - Manuf. Housing	Count	356	23	100	18,442	19,137			24
	Residential - Multi-Dwellings - 5 to 9 unit	Count	2	23	100	7,158	7,611			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	23	100	1,404	1,493			24
	Residential - Single Family Dwelling	Count	365	23	100	78,720	83,705			24
	Residential - Triplex-Quads	Count	4	23	100	4,172	4,436			24
	solid waste facilities	Count	2	22	25	0	0			0
	transln_ca	Length (ft)	19,080	23	-	4,698	0			0
	water_trans	Count	3	15	-	0	0	185,145	267,914	0
Browns_Island	Hazmat HAZUS SDURS	Count	2	9	-	0	0			0
	solid waste facilities	Count	1	9	25	0	0	0	0	0
Byron_Tract 1	air trans	Count	2	9	-	0	0			0
	Commercial - Professional/ Technical Se	Count	2	16	100	4	4			18
	Commercial - Retail Trade	Count	2	16	100	60	66			18
	Delta Roads PBSJ Minor Roads	Length (ft)	26,456	16	25	5,291	1,455			6
	gas oil wells	Count	2	10	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	6	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	6,850	16	25	2,261	622			3
	Residential - Manuf. Housing	Count	4	16	100	236	245			24
	Residential - Single Family Dwelling	Count	12	16	100	3,238	3,443			24
	sewage treat	Count	2	20	30	200,000	66,000			12
	transln_ca	Length (ft)	38,966	16	-	12,546	0	72,935	227,636	0
Byron_Tract 2	Boatlaunch	Count	2	5	100	200	220			0
	bridges not in HAZUS	Count	5	15	25	5,000	1,375			3
	Commercial - Professional/ Technical Se	Count	2	12	100	2,128	2,107			18
	Commercial - Retail Trade	Count	2	12	42	460	309			15
	Delta Roads PBSJ Minor Roads	Length (ft)	14,586	12	25	2,917	802			6
	gas oil wells	Count	1	3	0	0	0			0
	Residential - Manuf. Housing	Count	4	12	100	142	147			24
	Residential - Single Family Dwelling	Count	18	12	100	5,843	6,213			24
	transln_ca	Length (ft)	27,831	12	-	8,961	0	11,173	25,651	0
Byron_Tract 3	Commercial - Professional/ Technical Se	Count	1	6	38	1,608	1,035			14
	Commercial - Retail Trade	Count	1	6	23	506	284			8
	Delta Roads PBSJ Minor Roads	Length (ft)	3,544	6	25	709	195			6
	Residential - Single Family Dwelling	Count	107	6	37	40,992	18,307	19,821	43,815	18
Cache_Haas_Tract 1	Delta Roads PBSJ Major Roads	Length (ft)	16,839	9	25	5,557	1,528			6
	Delta Roads PBSJ Minor Roads	Length (ft)	194,722	9	25	38,944	10,710			6

	Gas Oil Production Fields	Area (Acres)	3,779	9	0	0	0			0
	gas oil wells	Count	102	8	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	5	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	45,680	9	0	8,679	0			0
	Natural Gas Wells	Count	2	12	-	0	0			0
	Residential - Manuf. Housing	Count	1	9	100	152	157			24
	Residential - Single Family Dwelling	Count	18	9	44	4,662	2,527			21
Cache_Haas_Tract 2	transln_ca	Length (ft)	18,295	9	-	5,890	0	15,472	65,884	0
	Delta Roads PBSJ Minor Roads	Length (ft)	9,203	15	25	1,841	506			6
	Gas Oil Production Fields	Area (Acres)	604	15	0	0	0			0
	gas oil wells	Count	20	16	0	0	0			0
	Natural Gas Wells	Count	1	15	-	0	0			0
	Residential - Manuf. Housing	Count	1	15	100	30	31			24
	Residential - Single Family Dwelling	Count	5	15	100	1,373	1,459			24
Canal Ranch	transln_ca	Length (ft)	567	15	-	183	0	1,997	3,426	0
	Commercial - Professional/ Technical Se	Count	3	14	100	8,586	9,445			18
	Commercial - Retail Trade	Count	3	14	100	5,634	6,197			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,401	14	25	462	127			6
	Delta Roads PBSJ Minor Roads	Length (ft)	60,509	14	25	12,102	3,328			6
	Gas Oil Production Fields	Area (Acres)	294	14	0	0	0			0
	gas oil wells	Count	11	18	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	13	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	4,670	14	25	1,541	424			3
	Natural Gas Pipeline	Length (ft)	1,066	14	0	203	0			0
	Natural Gas Wells	Count	1	20	-	0	0			0
	Religion - Churches and other Non-Profit	Count	3	14	30	14,850	9,311			11
	Residential - Manuf. Housing	Count	15	14	100	710	737			24
	Residential - Single Family Dwelling	Count	7	14	100	1,260	1,340	32,559	51,348	24
Chipps_Island	gas oil wells	Count	2	9	0	0	0	0	0	0
Clifton Court Forebay Water	Boatlaunch	Count	1	14	100	100	110			0
	Commercial - Professional/ Technical Se	Count	1	14	100	394	433			18
	Commercial - Retail Trade	Count	1	14	100	86	95			18
	Residential - Single Family Dwelling	Count	2	14	100	515	547			24
	transln_ca	Length (ft)	9,887	14	-	3,183	0	1,185	4,278	0
Coney_Island	Residential - Manuf. Housing	Count	10	21	100	507	526			24
	Residential - Single Family Dwelling	Count	66	21	100	21,414	22,770	23,296	21,921	24
Deadhorse Island	Gas Oil Production Fields	Area (Acres)	201	20	0	0	0			0
	gas oil wells	Count	3	19	0	0	0			0
	Natural Gas Pipeline	Length (ft)	3,862	20	0	734	0			0
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	20	100	9	10			24
Decker_Island	Residential - Single Family Dwelling	Count	1	20	100	255	271	281	998	24
	Natural Gas Pipeline	Length (ft)	8,085	4	0	1,536	0	0	1,536	0
Discovery_Bay	Boatlaunch	Count	1	5	100	100	110			0
	Commercial - Banks	Count	1	10	28	1,148	682			10
	Commercial - Entertainment and Recrea	Count	8	10	29	12,944	7,760			10
	Commercial - Medical Clinics	Count	1	10	24	3,503	2,219			9
	Commercial - Professional/ Technical Se	Count	1	10	50	15,930	11,390			18
	Commercial - Retail Trade	Count	1	10	38	7,842	5,089			14
	Delta Roads PBSJ Minor Roads	Length (ft)	97,988	10	25	19,598	5,389			6
	hc ambulatory	Count	5	8	18	0	0			6
	Hwy HAZUS SDURS	Length (ft)	6,674	10	25	2,202	606			3
	Residential - Duplex	Count	1	10	50	1,863	1,113			24
	Residential - Manuf. Housing	Count	1	10	100	165	171			24

	Residential - Single Family Dwelling	Count	2,799	10	49	1,080,710	638,969	674,201	1,147,184	23
	Schools_HAZUS_SDURS	Count	1	12	24	1,180	701			9
	water_trans	Count	1	1	-	0	0			0
Egbert_Tract	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	197,483	13	25	39,497	10,862	17,620	58,085	6
	Gas_Oil_Production_Fields	Area (Acres)	3,532	13	0	0	0			0
	gas_oil_wells	Count	107	12	0	0	0			0
	Natural Gas Pipeline	Length (ft)	34,321	13	0	8,237	0			0
	Natural Gas Wells	Count	33	11	-	0	0			0
	Residential - Manuf. Housing	Count	3	13	100	185	191			24
	Residential - Single Family Dwelling	Count	24	13	100	6,176	6,567			24
	transln_ca	Length (ft)	12,395	13	-	3,991	0			0
Elk_Grove 1	bridges_not_in_HAZUS	Count	17	8	25	17,000	4,675	1,377,509	2,521,857	3
	Commercial - Entertainment and Recrea	Count	6	10	26	11,596	6,760			9
	Commercial - Medical Clinics	Count	4	10	22	11,310	7,066			8
	Commercial - Personal and Repair Servi	Count	6	10	32	14,016	8,634			12
	Commercial - Professional/ Technical Se	Count	2	10	47	23,628	16,504			17
	Commercial - Retail Trade	Count	2	10	34	15,564	9,759			12
	Commercial - Wholesale Trade	Count	2	10	29	18,484	11,081			10
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	45,032	10	25	14,861	4,087			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	463,707	10	25	92,741	25,504			6
	Gas_Oil_Production_Fields	Area (Acres)	599	10	0	0	0			0
	gas_oil_wells	Count	26	9	0	0	0			0
	hc_ambulatory	Count	25	5	14	0	0			5
	hc_nursing_res	Count	2	4	14	0	0			7
	Hwy_Bridge_HAZUS_SDURS	Count	12	15	25	24,000	6,600			3
	Hwy_HAZUS_SDURS	Length (ft)	25,677	10	25	8,473	2,330			3
	Industrial - Construction	Count	2	10	100	10,772	9,598			18
	Industrial - Heavy	Count	2	10	39	11,505	6,682			14
	Industrial - High Technology	Count	6	10	34	106,690	59,618			12
	Industrial - Light	Count	4	10	37	18,630	10,656			13
	Natural Gas Pipeline	Length (ft)	22,432	10	0	7,290	0			0
	Natural Gas Wells	Count	1	14	-	0	0			0
	rail_1000_nodes	Count	2	12	-	0	0			0
	Rail_HAZUS_SDURS	Length (ft)	18,982	10	25	5,410	1,488			1
	Residential - Duplex	Count	2	10	48	4,332	2,487			23
	Residential - Manuf. Housing	Count	51	10	100	3,893	4,025			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	8	10	48	31,845	18,285			23
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	10	48	5,019	2,882			23
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	10	48	2,883	1,655			23
	Residential - Single Family Dwelling	Count	6,574	10	47	2,040,078	1,150,842			22
	Residential - Triplex-Quads	Count	8	10	48	10,473	6,014			23
	substation_ca	Count	1	15	25	1,000	275			0
	transln_ca	Length (ft)	42,091	10	-	10,363	0			0
	utilities	Count	1	2	-	0	0			0
Empire_Tract	Boatlaunch	Count	4	31	100	400	440	10,855	30,527	0
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	136,955	28	25	27,391	7,533			6
	gas_oil_wells	Count	5	26	0	0	0			0
	Residential - Manuf. Housing	Count	19	28	100	1,031	1,070			24
	Residential - Single Family Dwelling	Count	10	28	100	1,705	1,813			24
Fabian_Tract	air_trans	Count	4	12	-	0	0			0
	Boatlaunch	Count	4	14	100	400	440			0
	Commercial - Retail Trade	Count	4	14	100	1,384	1,522			18
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	5,137	14	25	1,695	466			6

	Delta Roads PBSJ Minor Roads	Length (ft)	236,758	14	25	47,352	13,022			6
	gas oil wells	Count	8	13	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,818	14	0	345	0			0
	Residential - Duplex	Count	14	14	100	4,961	5,275			24
	Residential - Institutional and Dormitory	Count	7	14	38	32,886	17,750			18
	Residential - Manuf. Housing	Count	45	14	100	2,316	2,403			24
	Residential - Single Family Dwelling	Count	86	14	100	18,075	19,220			24
	transln_ca	Length (ft)	24,538	14	-	6,042	0	60,099	115,456	0
	Delta Roads PBSJ Minor Roads	Length (ft)	113	17	25	23	6	6	23	6
Fay Island	Delta Roads PBSJ Major Roads	Length (ft)	29,511	10	25	9,739	2,678			6
Glanville_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	62,569	10	25	12,514	3,441			6
	Gas Oil Production Fields	Area (Acres)	129	10	0	0	0			0
	gas oil wells	Count	18	12	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	8	9	25	16,000	4,400			3
	Hwy HAZUS SDURS	Length (ft)	18,225	10	25	6,014	1,654			3
	Natural Gas Pipeline	Length (ft)	383	10	0	124	0			0
	Rail HAZUS SDURS	Length (ft)	9,282	10	25	2,645	727			1
	Residential - Institutional and Dormitory	Count	2	10	26	5,232	2,225			12
	Residential - Manuf. Housing	Count	5	10	100	195	202			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	10	50	93	56			24
	Residential - Single Family Dwelling	Count	18	10	49	4,307	2,547	19,696	59,584	23
	Delta Roads PBSJ Major Roads	Length (ft)	7,030	14	25	2,320	638			6
	Delta Roads PBSJ Minor Roads	Length (ft)	1,047	14	25	209	58			6
	Hwy HAZUS SDURS	Length (ft)	267	14	25	88	24			3
Gliole_District	Rail HAZUS SDURS	Length (ft)	7,101	14	25	2,024	557			1
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	14	100	21	22			24
	Residential - Single Family Dwelling	Count	5	14	100	1,513	1,609			24
	transln_ca	Length (ft)	7,489	14	-	1,844	0	2,908	8,019	0
	Agriculture	Count	1	22	100	8,486	8,028			18
	Boatlaunch	Count	1	22	100	100	110			0
Grand Island	Commercial - Banks	Count	1	22	100	1,084	1,192			18
	Commercial - Professional/ Technical Se	Count	1	22	100	6,378	7,016			18
	Commercial - Retail Trade	Count	1	22	100	6,638	7,302			18
	Delta Roads PBSJ Major Roads	Length (ft)	3,301	22	25	1,089	300			6
	Delta Roads PBSJ Minor Roads	Length (ft)	169,392	22	25	33,878	9,317			6
	Gas Oil Production Fields	Area (Acres)	2,801	22	0	0	0			0
	gas oil wells	Count	96	21	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	10	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	75,586	22	25	24,943	6,859			3
	Industrial - Light	Count	7	22	100	39,675	38,405			18
	Natural Gas Pipeline	Length (ft)	11,590	22	0	2,202	0			0
	Natural Gas Wells	Count	4	21	-	0	0			0
	Residential - Duplex	Count	5	22	100	2,526	2,686			24
	Residential - Institutional and Dormitory	Count	1	22	100	5,649	6,007			24
	Residential - Manuf. Housing	Count	39	22	100	2,070	2,148			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	22	100	3,597	3,825			24
	Residential - Single Family Dwelling	Count	366	22	100	97,203	103,359			24
	Schools HAZUS SDURS	Count	1	29	100	1,180	1,194			18
	substation_ca	Count	1	27	25	1,000	275			0
	transln_ca	Length (ft)	48,859	22	-	12,030	0			0
	US_cell towers	Count	1	10	-	250	0	199,123	253,979	1
Hastings_Tract 1	Commercial - Retail Trade	Count	1	15	100	6	7			18

	Gas Oil Production Fields	Area (Acres)	46	15	0	0	0	7	6	0
Hastings_Tract 2	Commercial - Retail Trade	Count	1	15	100	182	200			18
	Delta Roads PBSJ Minor Roads	Length (ft)	33,040	15	25	6,608	1,817			6
	Gas Oil Production Fields	Area (Acres)	465	15	0	0	0			0
	gas oil wells	Count	38	14	0	0	0			0
	Natural Gas Wells	Count	3	16	-	0	0			0
	Residential - Manuf. Housing	Count	1	15	100	66	68			24
	Residential - Single Family Dwelling	Count	11	15	100	3,024	3,216			24
	transln_ca	Length (ft)	11,506	15	-	3,705	0	5,301	13,585	0
Holland_Land	Delta Roads PBSJ Major Roads	Length (ft)	119	16	25	39	11			6
	Delta Roads PBSJ Minor Roads	Length (ft)	228	16	25	46	13			6
	gas oil wells	Count	2	16	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,793	16	25	3,232	889			3
	Petroleum Pipelines	Length (ft)	97	16	0	20	0			0
	Residential - Single Family Dwelling	Count	2	16	100	576	612			24
	transln_ca	Length (ft)	78	16	-	19	0	1,525	3,932	0
Holland_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	52,160	20	25	10,432	2,869			6
	gas oil wells	Count	11	20	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	15	25	2,000	550			3
	Residential - Manuf. Housing	Count	4	20	100	192	199			24
	Residential - Single Family Dwelling	Count	12	20	100	3,164	3,364	6,982	15,788	24
Honker_Bay_Club	Gas Oil Production Fields	Area (Acres)	47	10	0	0	0			0
	Natural Gas Pipeline	Length (ft)	4,395	10	0	835	0			0
	Petroleum Pipelines	Length (ft)	4,793	10	0	1,007	0			0
	Residential - Single Family Dwelling	Count	3	10	49	801	474	474	2,643	23
Hotchkiss_Tract 1	Boatlaunch	Count	2	12	100	200	220			0
	Commercial - Professional/ Technical Se	Count	2	12	100	6,068	6,007			18
	Commercial - Retail Trade	Count	2	12	42	1,340	899			15
	Delta Roads PBSJ Minor Roads	Length (ft)	92,186	12	25	18,437	5,070			6
	Gas Oil Production Fields	Area (Acres)	46	12	0	0	0			0
	gas oil wells	Count	26	12	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	11	25	4,000	1,100			3
	Natural Gas Pipeline	Length (ft)	21,406	12	0	4,067	0			0
	Natural Gas Wells	Count	5	11	-	0	0			0
	Residential - Duplex	Count	10	12	100	4,170	4,434			24
	Residential - Manuf. Housing	Count	160	12	100	8,348	8,662			24
	Residential - Single Family Dwelling	Count	500	12	100	136,322	144,955			24
	Residential - Triplex-Quads	Count	4	12	100	1,872	1,991			24
	transln_ca	Length (ft)	45,599	12	-	14,681	0	173,339	199,506	0
Hotchkiss_Tract 2	Delta Roads PBSJ Minor Roads	Length (ft)	9,014	12	25	1,803	496			6
	Gas Oil Production Fields	Area (Acres)	1,033	12	0	0	0			0
	gas oil wells	Count	3	12	0	0	0			0
	Natural Gas Pipeline	Length (ft)	2,371	12	0	450	0	496	2,253	0
Jersey_Island	Delta Roads PBSJ Minor Roads	Length (ft)	37,574	20	25	7,515	2,067			6
	Gas Oil Production Fields	Area (Acres)	632	20	0	0	0			0
	gas oil wells	Count	15	18	0	0	0			0
	Natural Gas Pipeline	Length (ft)	11,881	20	0	7,426	0			0
	Natural Gas Wells	Count	3	15	-	0	0			0
	Residential - Manuf. Housing	Count	1	20	100	65	67			24
	Residential - Single Family Dwelling	Count	4	20	100	1,065	1,132			24
	solid waste facilities	Count	1	25	25	0	0			0
	transln_ca	Length (ft)	26,540	20	-	8,545	0	3,266	24,615	0
Jones_Tract-Upper_and_Lower	bridges not in HAZUS	Count	2	5	25	2,000	550			3

	Commercial - Professional/ Technical Se	Count	2	22	100	956	1,052			18
	Commercial - Retail Trade	Count	2	22	100	176	194			18
	Delta Roads PBSJ Minor Roads	Length (ft)	125,981	22	25	25,196	6,929			6
	Gas Oil Production Fields	Area (Acres)	106	22	0	0	0			0
	gas oil wells	Count	32	23	0	0	0			0
	gas pipeline kinder morgan LS 9	Length (ft)	27,507	22	0	5,776	0			0
	Hwy Bridge HAZUS SDURS	Count	2	21	25	4,000	1,100			3
	mokelumne aqueduct pipe	Length (ft)	82,208	22	-	411,040	34,363			1
	Natural Gas Pipeline	Length (ft)	15,033	22	0	24,203	0			0
	Natural Gas Storage	Count	1	25	-	0	0			0
	Natural Gas Wells	Count	1	24	-	0	0			0
	Rail Bridge HAZUS SDURS	Count	2	4	100	2,000	0			1
	Rail HAZUS SDURS	Length (ft)	28,465	22	100	8,113	8,800			1
	Residential - Duplex	Count	3	22	100	1,307	1,390			24
	Residential - Institutional and Dormitory	Count	5	22	100	32,351	34,400			24
	Residential - Manuf. Housing	Count	10	22	100	445	462			24
	Residential - Single Family Dwelling	Count	14	22	100	2,757	2,932			24
Kasson_District	US cell towers	Count	3	18	-	750	0	92,171	521,071	1
	Delta Roads PBSJ Minor Roads	Length (ft)	5,307	12	25	1,061	292			6
	gas oil wells	Count	4	13	0	0	0			0
	Residential - Single Family Dwelling	Count	28	12	100	5,591	5,945			24
King_Island	transln ca	Length (ft)	9,505	12	-	2,340	0	6,237	8,993	0
	Boatlaunch	Count	4	21	100	400	440			0
	Commercial - Entertainment and Recrea	Count	4	23	100	7,088	7,797			18
	Commercial - Professional/ Technical Se	Count	4	23	100	7,464	8,210			18
	Commercial - Retail Trade	Count	4	23	100	54,176	59,594			18
	Delta Roads PBSJ Minor Roads	Length (ft)	162,620	23	25	32,524	8,944			6
	Gas Oil Production Fields	Area (Acres)	178	23	0	0	0			0
	gas oil wells	Count	10	22	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	8	22	25	16,000	4,400			3
	Natural Gas Wells	Count	2	22	-	0	0			0
	Residential - Duplex	Count	4	23	100	1,122	1,193			24
	Residential - Institutional and Dormitory	Count	4	23	100	21,336	22,687			24
	Residential - Manuf. Housing	Count	230	23	100	11,681	12,121			24
	Residential - Single Family Dwelling	Count	92	23	100	18,542	19,716			24
	water trans	Count	4	25	-	0	0	145,102	170,332	0
Libby_McNeil_Tract 1	Commercial - Professional/ Technical Se	Count	2	9	47	2,220	1,551			17
	Commercial - Retail Trade	Count	2	9	34	2,672	1,675			12
	Communication HAZUS SDURS	Count	2	12	100	236	260			18
	Delta Roads PBSJ Major Roads	Length (ft)	5,110	9	25	1,686	464			6
	Delta Roads PBSJ Minor Roads	Length (ft)	14,141	9	25	2,828	778			6
	Gas Oil Production Fields	Area (Acres)	143	9	0	0	0			0
	gas oil wells	Count	7	11	0	0	0			0
	Residential - Duplex	Count	6	9	48	2,619	1,504			23
	Residential - Manuf. Housing	Count	3	9	100	182	188			24
	Residential - Single Family Dwelling	Count	57	9	47	15,440	8,710	15,129	27,884	22
Libby_McNeil_Tract 2	Boatlaunch	Count	2	9	100	200	220			0
	Commercial - Retail Trade	Count	2	11	38	4	3			14
	Delta Roads PBSJ Minor Roads	Length (ft)	480	11	25	96	26			6
	Gas Oil Production Fields	Area (Acres)	43	11	0	0	0			0
	Residential - Single Family Dwelling	Count	6	11	49	1,548	915	1,164	1,848	23
Liberte Island	Delta Roads PBSJ Minor Roads	Length (ft)	35,790	15	25	7,158	1,968			6
	Gas Oil Production Fields	Area (Acres)	744	15	0	0	0			0

Lincoln_Village_Tract	gas oil wells	Count	24	15	0	0	0	2,518	14,599	0
	Hwy Bridge HAZUS SDURS	Count	1	14	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	28,637	15	0	5,441	0			0
	Commercial - Entertainment and Recrea	Count	9	7	20	10,902	5,996			7
	Commercial - Professional/ Technical Se	Count	1	7	41	7,226	4,809			15
	Commercial - Retail Trade	Count	1	7	26	14,066	8,200			9
	Delta Roads PBSJ Major Roads	Length (ft)	5,052	7	25	1,667	458			6
	Delta Roads PBSJ Minor Roads	Length (ft)	151,476	7	25	30,295	8,331			6
	hc ambulatory	Count	1	10	22	0	0			8
	Hwy Bridge HAZUS SDURS	Count	6	8	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	5,677	7	25	1,873	515			3
	Religion - Churches and other Non-Profit	Count	1	7	14	4,296	2,245			5
	Residential - Duplex	Count	68	7	43	5,310	2,699			21
	Residential - Multi-Dwellings - 10 to 19 u	Count	2	7	43	3,579	1,819			21
	Residential - Multi-Dwellings - 5 to 9 units	Count	34	7	43	81,113	41,221			21
	Residential - Multi-Dwellings - 50+ units	Count	4	7	43	101,418	51,541			21
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	7	43	20,871	10,607			21
	Residential - Multi-Dwellings- 20 to 49 un	Count	1	7	43	14,930	7,587			21
	Residential - Single Family Dwelling	Count	3,429	7	39	919,649	441,232			19
	Residential - Triplex-Quads	Count	76	7	43	32,369	16,450			21
	Schools HAZUS SDURS	Count	9	4	9	1,180	474			3
	water trans	Count	1	6	-	0	0			0
Lisbon_District	Airports HAZUS SDURS	Count	2	15	25	12,862	3,537	607,484	1,262,743	3
	Delta Roads PBSJ Major Roads	Length (ft)	20,168	17	25	6,655	1,830			6
	Delta Roads PBSJ Minor Roads	Length (ft)	29,824	17	25	5,965	1,640			6
	Gas Oil Production Fields	Area (Acres)	795	17	0	0	0			0
	gas oil wells	Count	21	17	0	0	0			0
	Rail HAZUS SDURS	Length (ft)	16,389	17	25	4,671	1,284			1
	Residential - Duplex	Count	2	17	100	558	593			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	17	100	861	916			24
	Residential - Single Family Dwelling	Count	59	17	100	15,946	16,956			24
	Runway HAZUS SDURS	Count	2	15	25	73,349	20,171			0
	transln ca	Length (ft)	16,185	17	-	3,985	0			0
	US cell towers	Count	2	10	-	500	0			1
Little Holland Tract	Gas Oil Production Fields	Area (Acres)	89	13	0	0	0			0
	gas oil wells	Count	2	13	0	0	0	0	0	0
Little_Egbert_Tract	Commercial - Professional/ Technical Se	Count	3	17	100	6	7	27,988	41,697	18
	Commercial - Retail Trade	Count	3	17	100	6	7			18
	Delta Roads PBSJ Major Roads	Length (ft)	150	17	25	50	14			6
	Delta Roads PBSJ Minor Roads	Length (ft)	42,140	17	25	8,428	2,318			6
	Gas Oil Production Fields	Area (Acres)	1,263	17	0	0	0			0
	gas oil wells	Count	27	18	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	6	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	5,495	17	25	1,813	499			3
	Natural Gas Pipeline	Length (ft)	13,698	17	0	3,288	0			0
	Natural Gas Wells	Count	2	7	-	0	0			0
	Residential - Duplex	Count	3	17	100	608	646			24
	Residential - Manuf. Housing	Count	11	17	100	472	490			24
	Residential - Single Family Dwelling	Count	77	17	100	21,027	22,359			24
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	11,403	10	25	2,281	627	1,053	2,933	6
	gas oil wells	Count	1	5	0	0	0			0
	Residential - Manuf. Housing	Count	3	10	100	90	93			24
	Residential - Single Family Dwelling	Count	3	10	49	563	333			23

Mandeville_Island	Delta Roads PBSJ Minor Roads	Length (ft)	26,063	27	25	5,213	1,433	1,433	5,213	6
	gas oil wells	Count	10	29	0	0	0			0
McCormack_Williamson_Tract	Communication HAZUS SDURS	Count	2	12	100	236	260	1,075	4,093	18
	Delta Roads PBSJ Minor Roads	Length (ft)	14,823	14	25	2,965	815			6
	Gas Oil Production Fields	Area (Acres)	886	14	0	0	0			0
	Gas Oil Production Fields	Area (Acres)	2,055	24	0	0	0			0
	gas oil wells	Count	20	14	0	0	0			0
	Natural Gas Pipeline	Length (ft)	4,699	14	0	893	0			0
McDonald_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	67,361	27	25	13,472	3,705	21,141	36,246	6
	gas oil wells	Count	105	24	0	0	0			0
	Natural Gas Pipeline	Length (ft)	20,905	27	0	6,376	0			0
	Residential - Institutional and Dormitory	Count	3	27	100	16,398	17,437			24
McMullin_Ranch-River_Junction Tract	Commercial - Retail Trade	Count	2	10	38	120	78	24,450	62,527	14
	Delta Roads PBSJ Major Roads	Length (ft)	23,375	10	25	7,714	2,121			6
	Delta Roads PBSJ Minor Roads	Length (ft)	62,052	10	25	12,410	3,413			6
	gas oil wells	Count	2	10	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	10	25	4,000	1,100			3
	Natural Gas Pipeline	Length (ft)	11,554	10	0	3,004	0			0
	Residential - Manuf. Housing	Count	14	10	100	627	651			24
	Residential - Single Family Dwelling	Count	109	10	49	28,901	17,087			23
	transln_ca	Length (ft)	23,358	10	-	5,751	0			0
	Medford_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,314	23	25	5,663			1,557
Residential - Institutional and Dormitory	Count	1	23	100	2,897	3,080	24			
Merritt Island	Commercial - Professional/ Technical Se	Count	2	15	100	1,552	1,707	33,090	47,169	18
	Commercial - Retail Trade	Count	2	15	100	340	374			18
	Delta Roads PBSJ Major Roads	Length (ft)	20,406	15	25	6,734	1,852			6
	Delta Roads PBSJ Minor Roads	Length (ft)	74,962	15	25	14,992	4,123			6
	Gas Oil Production Fields	Area (Acres)	185	15	0	0	0			0
	gas oil wells	Count	15	15	0	0	0			0
	Residential - Manuf. Housing	Count	5	15	100	336	348			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	15	100	360	383			24
	Residential - Single Family Dwelling	Count	88	15	100	22,855	24,303	24		
Middle_Roberts_Island	Boatlaunch	Count	3	22	100	300	330	33,090	47,169	0
	bridges not in HAZUS	Count	1	14	25	1,000	275			3
	Commercial - Personal and Repair Servi	Count	1	15	100	1,226	1,349			18
	Commercial - Professional/ Technical Se	Count	1	15	100	716	788			18
	Commercial - Retail Trade	Count	1	15	100	566	623			18
	Dams HAZUS SDURS	Count	1	12	0	0	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	27,590	15	25	9,105	2,504			6
	Delta Roads PBSJ Minor Roads	Length (ft)	303,675	15	25	60,735	16,702			6
	Gas Oil Production Fields	Area (Acres)	3,143	15	0	0	0			0
	gas oil wells	Count	104	15	0	0	0			0
	gas pipeline kinder morgan LS 9	Length (ft)	24,056	15	0	5,052	0			0
	Hwy Bridge HAZUS SDURS	Count	1	10	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	44,694	15	25	14,749	4,056			3
	mokelumne aqueduct pipe	Length (ft)	66,109	15	0	330,545	0			0
	Natural Gas Pipeline	Length (ft)	64,386	15	0	12,233	0			0
	Natural Gas Wells	Count	14	8	-	0	0			0
	Petroleum Pipelines	Length (ft)	9,151	15	0	1,922	0			0
	Rail HAZUS SDURS	Length (ft)	27,694	15	25	7,893	2,171			1
	Residential - Duplex	Count	8	15	100	3,419	3,635			24
	Residential - Institutional and Dormitory	Count	6	15	47	36,474	22,441			23
	Residential - Manuf. Housing	Count	37	15	100	1,937	2,009			24

	Residential - Single Family Dwelling	Count	145	15	100	34,163	36,326	94,952	566,147	24
	Schools HAZUS SDURS	Count	1	21	100	1,180	1,194			18
	solid waste facilities	Count	1	12	25	0	0			0
	transln ca	Length (ft)	166,254	15	-	40,934	0			0
Netherlands 1	Delta Roads PBSJ Minor Roads	Length (ft)	430	14	25	86	24	1,652	3,941	6
	Gas Oil Production Fields	Area (Acres)	221	14	0	0	0			0
	gas oil wells	Count	10	15	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,494	14	25	3,133	862			3
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	14	100	21	22			24
	Residential - Single Family Dwelling	Count	2	14	100	701	745			24
Netherlands 2	air trans	Count	1	16	-	0	0	127,286	196,852	0
	Commercial - Professional/ Technical Se	Count	1	17	100	312	343			18
	Commercial - Retail Trade	Count	1	17	100	2,510	2,761			18
	Delta Roads PBSJ Major Roads	Length (ft)	25,540	17	25	8,428	2,318			6
	Delta Roads PBSJ Minor Roads	Length (ft)	326,220	17	25	65,244	17,942			6
	Fire Stations SDURS	Count	2	13	40	3,540	2,586			14
	Gas Oil Production Fields	Area (Acres)	885	17	0	0	0			0
	gas oil wells	Count	79	18	0	0	0			0
	Hazmat HAZUS SDURS	Count	1	14	-	0	0			0
	hc ambulatory	Count	1	21	100	0	0			18
	Hwy Bridge HAZUS SDURS	Count	1	3	25	2,000	550			3
	Hwy HAZUS SDURS	Length (ft)	70,322	17	25	23,206	6,382			3
	Natural Gas Wells	Count	1	19	-	0	0			0
	rail 1000 nodes	Count	4	18	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	7,594	17	25	2,164	595			1
	Residential - Institutional and Dormitory	Count	1	17	100	6,960	7,401			24
	Residential - Manuf. Housing	Count	8	17	100	497	515			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	17	100	1,661	1,766			24
	Residential - Single Family Dwelling	Count	294	17	100	77,970	82,908			24
	Schools HAZUS SDURS	Count	2	7	13	2,360	1,220			5
	solid waste facilities	Count	2	18	25	0	0			0
New_Hope_Tract	Agriculture	Count	2	11	100	7,212	6,823	93,645	142,314	18
	Boatlaunch	Count	4	14	100	400	440			0
	Commercial - Professional/ Technical Se	Count	2	11	100	1,280	1,267			18
	Commercial - Retail Trade	Count	2	11	42	4,192	2,813			15
	Delta Roads PBSJ Major Roads	Length (ft)	30,583	11	25	10,092	2,775			6
	Delta Roads PBSJ Minor Roads	Length (ft)	129,887	11	25	25,977	7,144			6
	Gas Oil Production Fields	Area (Acres)	1,893	11	0	0	0			0
	gas oil wells	Count	66	12	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	6	9	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	20,018	11	25	6,606	1,817			3
	Natural Gas Pipeline	Length (ft)	44,656	11	0	8,485	0			0
	Natural Gas Wells	Count	3	14	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	5,104	11	25	1,455	400			1
	Residential - Duplex	Count	2	11	100	1,710	1,818			24
	Residential - Manuf. Housing	Count	185	11	100	9,565	9,926			24
	Residential - Single Family Dwelling	Count	253	11	100	51,839	55,122			24
	solid waste facilities	Count	2	5	25	0	0			0
	US cell towers	Count	6	8	-	1,500	0			1
	water trans	Count	2	10	-	0	0			0
Orwood_Tract	Commercial - Professional/ Technical Se	Count	1	20	100	768	845			18
	Commercial - Retail Trade	Count	1	20	100	54	59			18
	Delta Roads PBSJ Minor Roads	Length (ft)	24,805	20	25	4,961	1,364			6

	gas oil wells	Count	3	22	0	0	0	55,377	251,174	0
	gas pipeline kinder morgan LS 9	Length (ft)	14,841	20	0	3,117	0			
	mokelumne aqueduct pipe	Length (ft)	40,546	20	-	202,730	16,948			
	Natural Gas Pipeline	Length (ft)	6,497	20	0	1,819	0			
	Residential - Manuf. Housing	Count	1	20	100	47	48			
	Residential - Single Family Dwelling	Count	89	20	100	33,962	36,112			
	transln_ca	Length (ft)	11,545	20	-	3,717	0			
Palm_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	24,443	22	25	4,889	1,344	6,973	22,563	0
	Gas Oil Production Fields	Area (Acres)	101	22	0	0	0			
	gas oil wells	Count	3	23	0	0	0			
	Natural Gas Pipeline	Length (ft)	27,094	22	0	7,586	0			
	Rail HAZUS SDURS	Length (ft)	12,628	22	25	3,599	990			
	Residential - Manuf. Housing	Count	2	22	100	102	106			
	Residential - Single Family Dwelling	Count	13	22	100	4,263	4,533			
transln_ca	Length (ft)	6,596	22	-	2,124	0				
Paradise Junction	Delta Roads PBSJ Major Roads	Length (ft)	2,949	10	25	973	268	55,027	170,391	0
	Delta Roads PBSJ Minor Roads	Length (ft)	35,491	10	25	7,098	1,952			
	gas oil wells	Count	7	11	0	0	0			
	Hwy Bridge HAZUS SDURS	Count	4	11	25	8,000	2,200			
	Hwy HAZUS SDURS	Length (ft)	1,557	10	25	514	141			
	Natural Gas Wells	Count	1	13	-	0	0			
	Prison	Count	2	6	17	50,000	9,350			
	Rail HAZUS SDURS	Length (ft)	9,340	10	25	2,662	732			
	Residential - Institutional and Dormitory H	Count	15	10	26	85,109	36,200			
	Residential - Manuf. Housing	Count	2	10	100	138	143			
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	10	50	30	18			
	Residential - Single Family Dwelling	Count	28	10	49	5,875	3,474			
	substation_ca	Count	2	9	25	2,000	550			
	transln_ca	Length (ft)	32,461	10	-	7,992	0			
	Pescadero	bridges not in HAZUS	Count	2	10	25	2,000			
Commercial - Professional/ Technical Se		Count	2	10	50	4,980	3,561			
Commercial - Retail Trade		Count	2	10	38	4,312	2,798			
Delta Roads PBSJ Major Roads		Length (ft)	9,166	10	25	3,025	832			
Delta Roads PBSJ Minor Roads		Length (ft)	172,317	10	25	34,463	9,477			
Gas Oil Production Fields		Area (Acres)	22	10	0	0	0			
gas oil wells		Count	13	8	0	0	0			
Hazmat HAZUS SDURS		Count	9	5	-	0	0			
Hwy Bridge HAZUS SDURS		Count	17	10	25	34,000	9,350			
Hwy HAZUS SDURS		Length (ft)	29,651	10	25	9,785	2,691			
Natural Gas Pipeline		Length (ft)	5,131	10	0	975	0			
Petroleum Pipelines		Length (ft)	6,138	10	0	1,289	0			
Rail HAZUS SDURS		Length (ft)	257	10	25	73	20			
Residential - Manuf. Housing		Count	48	10	100	2,479	2,573			
Residential - Multi-Dwellings- 10 to 19 ur		Count	2	10	50	1,227	733			
Residential - Single Family Dwelling		Count	213	10	49	55,962	33,088			
sewage treat		Count	2	9	30	200,000	66,000			
transln_ca		Length (ft)	22,905	10	-	5,639	0			
US cell towers		Count	2	1	-	500	0			
utilities		Count	1	18	-	0	0			
Peter Pocket	Gas Oil Production Fields	Area (Acres)	601	11	0	0	0			0
	gas oil wells	Count	9	11	0	0	0			
	Natural Gas Pipeline	Length (ft)	5,700	11	0	1,083	0			
	Natural Gas Wells	Count	3	12	-	0	0			

Pico_Naglee_Tract	Residential - Manuf. Housing	Count	1	11	100	24	25	470	2,139	24
	Residential - Single Family Dwelling	Count	3	11	49	753	445			23
	transln_ca	Length (ft)	865	11	-	279	0			0
	Commercial - Entertainment and Recrea	Count	11	11	29	23,111	13,855			10
Pico_Naglee_Tract	Commercial - Personal and Repair Servi	Count	14	11	35	26,667	16,867	392,123	681,746	13
	Commercial - Professional and Technica	Count	4	11	50	68,336	48,860			18
	Commercial - Retail Trade	Count	4	11	38	99,592	64,635			14
	Commercial - Wholesale Trade	Count	11	11	32	53,691	33,074			12
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	40,058	11	25	13,219	3,635			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	194,516	11	25	38,903	10,698			6
	gas_oil_wells	Count	14	10	0	0	0			0
	Hazmat HAZUS SDURS	Count	2	14	-	0	0			0
	hc_ambulatory	Count	2	10	24	0	0			9
	hc_nursing_res	Count	2	9	20	0	0			10
	Hwy_Bridge_HAZUS_SDURS	Count	6	5	25	12,000	3,300			3
	Hwy_HAZUS_SDURS	Length (ft)	3,465	11	25	1,143	314			3
	Industrial - Construction	Count	2	11	100	17,804	16,059			18
	Industrial - Heavy	Count	9	11	42	57,105	34,674			15
	Industrial - Light	Count	2	11	39	9,495	5,640			14
	Industrial - Metals, Minerals Processing	Count	2	11	45	27,315	16,946			16
	Natural Gas Pipeline	Length (ft)	42,029	11	0	7,986	0			0
	Police Stations HAZUS SDURS	Count	2	10	31	8,260	5,706			11
	rail_1000_nodes	Count	2	8	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	2,787	11	25	794	218			1
	Religion - Churches and other Non-Profit	Count	2	11	17	6,156	3,420			6
	Residential - Duplex	Count	4	11	50	2,469	1,476			24
	Residential - Manuf. Housing	Count	28	11	100	1,551	1,610			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	11	50	102	61			24
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	11	50	93	56			24
	Residential - Single Family Dwelling	Count	600	11	49	186,839	110,469			23
	substation_ca	Count	2	8	25	2,000	550			0
	transln_ca	Length (ft)	67,480	11	-	16,614	0			0
	US_cell_towers	Count	2	10	-	500	0			1
	utilities	Count	1	12	-	0	0			0
Pierson_Tract	Commercial - Personal and Repair Servi	Count	3	19	100	4,980	5,478	83,204	119,291	18
	Commercial - Professional/ Technical Se	Count	2	19	100	4,596	5,056			18
	Commercial - Retail Trade	Count	2	19	100	1,996	2,196			18
	Communication HAZUS SDURS	Count	4	17	100	472	519			18
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	14,425	19	25	4,760	1,309			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	147,558	19	25	29,512	8,116			6
	Fire Stations SDURS	Count	2	9	23	3,540	2,321			8
	Gas_Oil_Production_Fields	Area (Acres)	322	19	0	0	0			0
	gas_oil_wells	Count	18	19	0	0	0			0
	hc_ambulatory	Count	2	6	16	0	0			6
	Hwy_Bridge_HAZUS_SDURS	Count	3	15	25	6,000	1,650			3
	Hwy_HAZUS_SDURS	Length (ft)	17,086	19	25	5,638	1,551			3
	Residential - Duplex	Count	3	19	100	2,286	2,431			24
	Residential - Manuf. Housing	Count	26	19	100	1,287	1,335			24
	Residential - Single Family Dwelling	Count	217	19	100	44,801	47,639			24
	Residential - Triplex-Quads	Count	2	19	100	1,248	1,327			24
	Schools HAZUS SDURS	Count	3	13	33	3,540	2,278			12
	transln_ca	Length (ft)	18,825	19	-	4,635	0			0
Pittsburg	Commercial - Personal and Repair Servi	Count	2	7	22	4,456	2,500			8

	Commercial - Professional/ Technical Se	Count	2	7	38	2,088	1,355			14
	Commercial - Retail Trade	Count	2	7	23	2,500	1,416			8
	Delta Roads PBSJ Major Roads	Length (ft)	6,213	7	25	2,050	564			6
	Delta Roads PBSJ Minor Roads	Length (ft)	7,797	7	25	1,559	429			6
	Industrial - Construction	Count	2	7	50	6,796	3,999			18
	Natural Gas Pipeline	Length (ft)	10,044	7	0	1,908	0			0
	Petroleum Pipelines	Length (ft)	5,423	7	0	1,139	0			0
	Port HAZUS SDURS	Count	2	11	0	5,145	0			0
	rail 1000 nodes	Count	8	5	-	0	0			0
	Rail Bridge HAZUS SDURS	Count	2	4	25	2,000	550			1
	Rail HAZUS SDURS	Length (ft)	14,711	7	25	4,193	1,153			1
	Residential - Duplex	Count	8	7	39	4,101	1,877			18
	Residential - Manuf. Housing	Count	2	7	100	111	114			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	7	39	3,306	1,513			18
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	7	39	1,461	669			18
	Residential - Single Family Dwelling	Count	186	7	37	53,067	23,700			18
	Residential - Triplex-Quads	Count	8	7	39	2,913	1,333			18
	substation_ca	Count	1	6	25	1,000	275			0
	transln_ca	Length (ft)	37,607	7	-	9,259	0			0
	utilities	Count	1	3	-	0	0	41,445	109,053	0
Prospect_Island	Delta Roads PBSJ Minor Roads	Length (ft)	5,398	16	25	1,080	297			6
	Gas Oil Production Fields	Area (Acres)	302	16	0	0	0			0
	gas oil wells	Count	11	14	0	0	0			0
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	16	100	2	2			24
	Residential - Single Family Dwelling	Count	2	16	100	707	751	1,050	1,788	24
Quimby_Island	bridges not in HAZUS	Count	1	20	25	1,000	275			3
	gas oil wells	Count	1	22	0	0	0			0
	Residential - Single Family Dwelling	Count	1	23	100	126	134	409	1,126	24
RD 17 (Mosssdale)	Boatlaunch	Count	4	3	100	400	440			0
	bridges not in HAZUS	Count	4	7	25	4,000	1,100			3
	Commercial - Banks	Count	2	6	17	1,696	895			6
	Commercial - Entertainment and Recrea	Count	3	6	18	4,959	2,646			6
	Commercial - Personal and Repair Servi	Count	2	6	22	4,144	2,302			8
	Commercial - Professional/ Technical Se	Count	2	6	38	19,436	12,507			14
	Commercial - Retail Trade	Count	2	6	23	14,032	7,872			8
	Commercial - Wholesale Trade	Count	4	6	19	17,499	9,432			7
	Delta Roads PBSJ Major Roads	Length (ft)	39,253	6	25	12,953	3,562			6
	Delta Roads PBSJ Minor Roads	Length (ft)	342,968	6	25	68,594	18,863			6
	Gas Oil Production Fields	Area (Acres)	313	6	0	0	0			0
	gas oil wells	Count	17	4	0	0	0			0
	Hazmat HAZUS SDURS	Count	5	3	-	0	0			0
	hc ambulatory	Count	3	2	12	0	0			4
	Hwy Bridge HAZUS SDURS	Count	17	6	25	34,000	9,350			3
	Hwy HAZUS SDURS	Length (ft)	30,637	6	25	10,110	2,780			3
	Industrial - Heavy	Count	5	6	26	30,484	14,754			9
	Natural Gas Wells	Count	1	4	-	0	0			0
	Rail Facility HAZUS SDRUS	Count	2	10	100	5,145	5,659			0
	Rail HAZUS SDURS	Length (ft)	8,867	6	25	2,527	695			1
	Residential - Duplex	Count	2	6	39	1,851	847			18
	Residential - Manuf. Housing	Count	247	6	100	12,969	13,220			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	6	39	111	51			18
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	6	39	585	268			18
	Residential - Single Family Dwelling	Count	2,863	6	37	846,664	378,120			18

	Residential - Triplex-Quads	Count	2	6	39	3,579	1,638	487,796	1,122,396	18
	Schools HAZUS_SDURS	Count	2	1	5	2,360	519			2
	substation_ca	Count	1	9	25	1,000	275			0
	transln_ca	Length (ft)	92,592	6	-	22,797	0			0
	US cell towers	Count	2	10	-	500	0			1
	utilities	Count	1	2	-	0	0			0
	Rindge_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	334,872	25	25	66,974			18,418
gas_oil_wells	Count	14	25	0	0	0	0			
Natural Gas Wells	Count	4	22	-	0	0	0			
Residential - Duplex	Count	4	25	100	1,146	1,219	24			
Residential - Manuf. Housing	Count	8	25	100	528	548	24			
Residential - Single Family Dwelling	Count	16	25	100	3,384	3,598	24			
US_cell_towers	Count	4	18	-	1,000	0	1			
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	2,927	9	25	585	161	1,212	9,988	6
gas_oil_wells	Count	2	11	0	0	0	0			
Hwy Bridge HAZUS_SDURS	Count	1	16	25	2,000	550	3			
Hwy HAZUS_SDURS	Length (ft)	5,521	9	25	1,822	501	3			
transln_ca	Length (ft)	22,668	9	-	5,581	0	0			
Roberts_Island	Boatlaunch	Count	3	1	100	300	330	330	300	0
Rough_and_Ready_Island	air_trans	Count	1	6	-	0	0	49,591	103,354	0
	Commercial - Entertainment and Recrea	Count	1	9	22	1,376	772			8
	Commercial - Personal and Repair Servi	Count	1	9	28	2,564	1,523			10
	Commercial - Professional/ Technical Se	Count	1	9	44	510	348			16
	Commercial - Retail Trade	Count	1	9	30	1,558	943			11
	Commercial - Wholesale Trade	Count	3	9	25	12,596	7,274			9
	Delta Roads PBSJ Major Roads	Length (ft)	8,461	9	25	2,792	768			6
	Delta Roads PBSJ Minor Roads	Length (ft)	80,981	9	25	16,196	4,454			6
	gas_oil_wells	Count	1	10	0	0	0			0
	Government - General Services	Count	13	9	23	39,875	26,142			8
	Hazmat HAZUS_SDURS	Count	3	4	-	0	0			0
	Industrial - Heavy	Count	1	9	35	4,280	2,410			13
	Petroleum Pipelines	Length (ft)	12,716	9	0	2,670	0			0
	rail_1000_nodes	Count	5	10	-	0	0			0
	Rail HAZUS_SDURS	Length (ft)	29,506	9	25	8,409	2,313			1
	Residential - Duplex	Count	3	9	46	1,026	556			22
	Residential - Manuf. Housing	Count	9	9	100	474	490			24
	Residential - Single Family Dwelling	Count	15	9	44	3,027	1,599			21
	tankfarms	Count	2	3	-	6,000	0			0
	Ryer Island	Delta Roads PBSJ Major Roads	Length (ft)	1,851	21	25	611			168
Delta Roads PBSJ Minor Roads	Length (ft)	116,940	21	25	23,388	6,432	6			
Gas Oil Production Fields	Area (Acres)	412	21	0	0	0	0			
gas_oil_wells	Count	22	20	0	0	0	0			
Hwy Bridge HAZUS_SDURS	Count	1	14	25	2,000	550	3			
Hwy HAZUS_SDURS	Length (ft)	56,502	21	25	18,646	5,128	3			
Natural Gas Wells	Count	3	21	-	0	0	0			
Residential - Manuf. Housing	Count	7	21	100	360	374	24			
Residential - Single Family Dwelling	Count	61	21	100	16,490	17,534	24			
Sacramento_Pocket_Area	air_trans	Count	11	7	-	0	0			0
	Airport Points	Count	2	5	25	0	0			0
	Boatlaunch	Count	3	17	100	300	330			0
	bridges not in HAZUS	Count	185	7	25	185,000	50,875			3
	Colleges and Universities	Count	2	10	17	46,370	29,176			6
	Commercial - Banks	Count	108	10	24	169,968	97,222			9

Commercial - Entertainment and Recrea	Count	229	10	26	421,838	245,932			9
Commercial - Hospitals	Count	4	10	47	140,178	103,002			17
Commercial - Medical Clinics	Count	201	10	22	612,815	382,887			8
Commercial - Personal and Repair Servi	Count	152	10	32	369,818	227,808			12
Commercial - Professional and Technica	Count	45	10	47	1,400,064	977,945			17
Commercial - Retail Trade	Count	10	10	34	719,294	450,997			12
Commercial - Theaters	Count	1	10	12	4,348	2,200			4
Commercial - Wholesale Trade	Count	42	10	29	259,336	155,472			10
Delta_Roads_PBSJ_Major_Roads	Length (ft)	686,062	10	25	226,400	62,260			6
Delta_Roads_PBSJ_Minor_Roads	Length (ft)	3,118,577	10	25	623,715	171,522			6
freeport_pipe_route_preferred	Length (ft)	27,576	10	-	0	0			0
gas_oil_wells	Count	15	13	0	0	0			0
Government - General Services	Count	198	10	27	602,878	405,857			10
hc_ambulatory	Count	765	7	18	0	0			6
hc_hospital	Count	23	10	50	0	0			18
hc_nursing_res	Count	66	8	18	0	0			9
Hwy_Bridge_HAZUS_SDURS	Count	14	14	25	28,000	7,700			3
Hwy_HAZUS_SDURS	Length (ft)	130,657	10	25	43,117	11,857			3
Industrial - Construction	Count	11	10	100	82,480	73,490			18
Industrial - Heavy	Count	13	10	39	103,903	60,347			14
Industrial - Light	Count	22	10	37	168,923	96,624			13
intermodal terminal facilities	Count	1	5	-	0	0			0
Natural Gas Pipeline	Length (ft)	81,043	10	0	26,339	0			0
Petroleum Pipelines	Length (ft)	46,294	10	0	9,722	0			0
rail_1000_nodes	Count	41	8	-	0	0			0
Rail_HAZUS_SDURS	Length (ft)	2,253	10	25	642	177			1
Religion - Churches and other Non-Profit	Count	64	10	15	389,094	211,862			5
Residential - Duplex	Count	1,682	10	48	685,349	393,527			23
Residential - Institutional and Dormitory	Count	113	10	23	788,715	308,282			11
Residential - Manuf. Housing	Count	1,233	10	100	65,087	67,299			24
Residential - Multi-Dwellings - 10 to 19 u	Count	265	10	48	5,037	2,892			23
Residential - Multi-Dwellings - 20 to 49 u	Count	18	10	48	17,250	9,905			23
Residential - Multi-Dwellings - 5 to 9 units	Count	558	10	48	1,292,510	742,159			23
Residential - Multi-Dwellings - 50+ units	Count	42	10	48	1,076,663	618,220			23
Residential - Multi-Dwellings- 10 to 19 ur	Count	265	10	48	932,772	535,598			23
Residential - Nursing Home	Count	7	10	23	32,364	12,650			11
Residential - Single Family Dwelling	Count	60,852	10	47	15,690,770	8,851,425			22
Residential - Triplex-Quads	Count	1,595	10	48	710,390	407,906			23
Schools_HAZUS_SDURS	Count	18	13	28	21,240	13,084			10
sewage_treat	Count	6	12	30	860,000	283,800			12
solid_waste_facilities	Count	38	11	25	0	0			0
substation_ca	Count	8	8	25	8,000	2,200			0
superfund_sites	Count	1	13	-	0	0			0
tankfarms	Count	3	11	-	9,000	0			0
transln_ca	Length (ft)	179,140	10	-	44,106	0			0
US_cell_towers	Count	1	10	-	250	0			1
utilities	Count	8	9	-	0	0	16,074,486	28,874,041	0
Sargent_Barnhart_Tract 1	Commercial - Professional/ Technical Se	Count	2	3	16	4			6
	Commercial - Retail Trade	Count	2	3	14	40			5
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	16,004	3	25	3,201			6
	gas_pipeline_kinder_morgan_LS_9	Length (ft)	5	3	0	1			0
	Residential - Duplex	Count	20	3	23	8,169			11
	Residential - Multi-Dwellings - 5 to 9 units	Count	2	3	23	6,786			11

Sargent_Barnhart_Tract 2	Residential - Multi-Dwellings- 10 to 19 un	Count	2	3	23	1,179	300	24,900	100,740	11
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	3	23	4,419	1,124			11
	Residential - Single Family Dwelling	Count	261	3	21	65,046	15,717			10
	Residential - Triplex-Quads	Count	10	3	23	4,815	1,225			11
	Schools HAZUS SDURS	Count	2	4	9	7,080	1,830			3
	air trans	Count	1	12	-	0	0			0
	Commercial - Banks	Count	8	9	24	12,312	7,042			9
	Commercial - Entertainment and Recrea	Count	17	9	26	32,894	19,177			9
	Commercial - Medical Clinics	Count	17	9	22	44,845	28,019			8
	Commercial - Personal and Repair Servi	Count	7	9	32	13,566	8,357			12
	Commercial - Professional and Technica	Count	6	9	47	133,348	93,144			17
	Commercial - Retail Trade	Count	1	9	34	20,294	12,724			12
	Delta Roads PBSJ Major Roads	Length (ft)	4,901	9	25	1,617	445			6
	Delta Roads PBSJ Minor Roads	Length (ft)	245,715	9	25	49,143	13,514			6
	gas pipeline kinder morgan LS 9	Length (ft)	14,483	9	0	3,041	0			0
	hc ambulatory	Count	98	7	18	0	0			6
	hc hospital	Count	2	14	100	0	0			18
	hc nursing res	Count	4	8	20	0	0			10
	Hwy Bridge HAZUS SDURS	Count	10	7	25	20,000	5,500			3
	Hwy HAZUS SDURS	Length (ft)	7,130	9	25	2,353	647			3
	mokelumne aqueduct pipe	Length (ft)	43,148	9	0	215,740	0			0
	Religion - Churches and other Non-Profit	Count	1	9	15	8,740	4,759			5
	Residential - Duplex	Count	79	9	48	25,824	14,828			23
	Residential - Institutional and Dormitory	Count	1	9	23	6,704	2,620			11
	Residential - Manuf. Housing	Count	23	9	100	1,515	1,567			24
	Residential - Multi-Dwellings - 10 to 19 u	Count	1	9	48	830	476			23
	Residential - Multi-Dwellings - 5 to 9 unit	Count	29	9	48	68,052	39,075			23
	Residential - Multi-Dwellings - 50+ units	Count	3	9	48	84,645	48,603			23
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	9	48	11,322	6,501			23
	Residential - Multi-Dwellings- 20 to 49 un	Count	1	9	48	7,296	4,189			23
	Residential - Single Family Dwelling	Count	3,660	9	47	1,162,187	655,609			22
	Residential - Triplex-Quads	Count	84	9	48	36,522	20,971			23
	Schools HAZUS SDURS	Count	6	8	13	7,080	3,699			5
	substation_ca	Count	1	13	25	1,000	275			0
	transln_ca	Length (ft)	10,184	9	-	2,507	0			0
Sargent_Barnhart_Tract 3	Boatlaunch	Count	2	10	100	200	220	30,486	48,200	0
	Commercial - Entertainment and Recrea	Count	8	11	29	2,515	1,508			10
	Commercial - Personal and Repair Servi	Count	2	11	35	18,432	11,658			13
	Commercial - Professional/ Technical Se	Count	2	11	50	9,740	6,964			18
	Commercial - Retail Trade	Count	2	11	38	600	389			14
	Delta Roads PBSJ Minor Roads	Length (ft)	2,402	11	25	480	132			6
	Residential - Multi-Dwellings - 5 to 9 unit	Count	2	11	50	1,659	992			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	11	50	189	113			24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	11	50	273	163			24
	Residential - Single Family Dwelling	Count	44	11	49	13,578	8,028			23
	Residential - Triplex-Quads	Count	2	11	50	534	319			24
Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Length (ft)	26,277	11	25	5,255	1,445			6
	gas oil wells	Count	1	11	0	0	0			0
	Residential - Single Family Dwelling	Count	5	11	49	1,553	918	2,363	6,808	23
Sherman_Island	Boatlaunch	Count	5	10	100	500	550			0
	Commercial - Professional/ Technical Se	Count	2	21	100	552	607			18
	Commercial - Retail Trade	Count	2	21	100	1,920	2,112			18
	Delta Roads PBSJ Major Roads	Length (ft)	1,522	21	25	502	138			6

	Delta Roads PBSJ Minor Roads	Length (ft)	119,684	21	25	23,937	6,583			6
	Gas Oil Production Fields	Area (Acres)	1,086	21	0	0	0			0
	gas oil wells	Count	60	20	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	38,217	21	25	12,612	3,468			3
	Natural Gas Pipeline	Length (ft)	145,514	21	0	48,020	0			0
	Natural Gas Wells	Count	4	17	-	0	0			0
	Residential - Duplex	Count	2	21	100	1,290	1,372			24
	Residential - Manuf. Housing	Count	63	21	100	3,240	3,362			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	21	100	225	239			24
	Residential - Single Family Dwelling	Count	54	21	100	11,228	11,939			24
	Residential - Triplex-Quads	Count	2	21	100	969	1,030			24
	transln_ca	Length (ft)	71,301	21	-	22,957	0	31,400	127,951	0
Shima_Tract	Commercial - Entertainment and Recrea	Count	6	10	29	2,436	1,460			10
	Commercial - Medical Clinics	Count	2	10	24	4,830	3,060			9
	Commercial - Personal and Repair Servi	Count	4	10	35	7,232	4,574			13
	Commercial - Professional and Technica	Count	2	10	50	40,308	28,820			18
	Commercial - Retail Trade	Count	2	10	38	18,424	11,957			14
	Delta Roads PBSJ Major Roads	Length (ft)	4,694	10	25	1,549	426			6
	Delta Roads PBSJ Minor Roads	Length (ft)	144,846	10	25	28,969	7,967			6
	gas oil wells	Count	1	6	0	0	0			0
	hc ambulatory	Count	11	7	18	0	0			6
	hc hospital	Count	2	7	35	0	0			13
	hc nursing res	Count	3	6	15	0	0			7
	Hwy Bridge HAZUS SDURS	Count	2	6	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	7,178	10	25	2,369	651			3
	Residential - Duplex	Count	66	10	50	26,351	15,749			24
	Residential - Institutional and Dormitory H	Count	2	10	26	10,944	4,655			12
	Residential - Multi-Dwellings - 10 to 19 u	Count	5	10	50	9,437	5,640			24
	Residential - Multi-Dwellings - 5 to 9 units	Count	36	10	50	76,537	45,744			24
	Residential - Multi-Dwellings - 50+ units	Count	5	10	50	77,123	46,094			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	5	10	50	16,313	9,749			24
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	10	50	7,845	4,689			24
	Residential - Single Family Dwelling	Count	2,817	10	49	709,620	419,563			23
	Residential - Triplex-Quads	Count	87	10	50	37,861	22,628			24
	Schools HAZUS SDURS	Count	2	4	9	21,240	8,528			3
	transln_ca	Length (ft)	28,920	10	-	7,120	0	643,055	1,110,507	0
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	8,821	10	25	1,764	485			6
	gas oil wells	Count	4	9	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	8,005	10	25	2,642	726			3
	transln_ca	Length (ft)	32,163	10	-	7,919	0	1,212	12,325	0
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Count	3	10	47	756	426	426	756	22
SM-123	Delta Roads PBSJ Major Roads	Length (ft)	4,064	8	25	1,341	369			6
	Delta Roads PBSJ Minor Roads	Length (ft)	44,712	8	25	8,942	2,459			6
	gas oil wells	Count	4	7	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	9	5	25	18,000	4,950			3
	Hwy HAZUS SDURS	Length (ft)	2,607	8	25	860	237			3
	intermodal terminal facilities	Count	3	4	-	0	0			0
	Natural Gas Pipeline	Length (ft)	2,480	8	0	471	0			0
	Petroleum Pipelines	Length (ft)	3,046	8	0	640	0			0
	rail 1000 nodes	Count	3	4	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	3,085	8	25	879	242			1
	Residential - Multi-Dwellings- 20 to 49 ur	Count	3	8	43	734	384			21
	Residential - Single Family Dwelling	Count	28	8	39	5,198	2,574			19

SM-124	Residential - Triplex-Quads	Count	3	8	43	1,022	535	11,749	39,396	21
	transln_ca	Length (ft)	5,315	8	-	1,309	0			0
	Commercial - Entertainment and Recrea	Count	6	8	22	3,606	2,023			8
SM-132	Commercial - Personal and Repair Servi	Count	5	8	28	1,360	808	328,715	719,256	10
	Commercial - Professional and Technica	Count	2	8	44	61,764	42,123			16
	Commercial - Retail Trade	Count	2	8	30	26,752	16,185			11
SM-133	Commercial - Wholesale Trade	Count	2	8	25	6,868	3,966	558	525	9
	Delta Roads PBSJ Major Roads	Length (ft)	8,486	8	25	2,800	770			6
	Delta Roads PBSJ Minor Roads	Length (ft)	70,817	8	25	14,163	3,895			6
SM-134	gas_oil_wells	Count	1	7	0	0	0	0	0	0
	Government - General Services	Count	3	8	23	9,506	6,170			8
	hc_ambulatory	Count	6	5	16	0	0			6
SM-198	hc_nursing_res	Count	2	7	18	0	0	2,595	5,383	9
	Hwy Bridge HAZUS SDURS	Count	2	6	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	4,224	8	25	1,394	383			3
SM-199	Natural Gas Pipeline	Length (ft)	4,078	8	0	775	0	1,178	2,341	0
	Petroleum Pipelines	Length (ft)	38,776	8	0	8,143	0			0
	Police Stations HAZUS SDURS	Count	2	6	15	8,260	4,688			5
SM-132	rail_1000_nodes	Count	6	5	-	0	0	558	525	0
	Rail Facility HAZUS SDRUS	Count	2	4	25	5,145	1,415			0
	Rail HAZUS SDURS	Length (ft)	29,823	8	25	8,500	2,337			1
SM-133	Residential - Duplex	Count	30	8	46	13,277	7,195	0	0	22
	Residential - Manuf. Housing	Count	77	8	100	4,013	4,134			24
	Residential - Multi-Dwellings - 10 to 19 un	Count	2	8	46	6,786	3,678			22
SM-134	Residential - Multi-Dwellings - 5 to 9 unit	Count	2	8	46	15,099	8,183	0	0	22
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	8	46	6,588	3,570			22
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	8	46	20,292	10,997			22
SM-198	Residential - Single Family Dwelling	Count	765	8	44	198,254	104,715	2,595	5,383	21
	Residential - Triplex-Quads	Count	53	8	46	23,098	12,518			22
	Schools HAZUS SDURS	Count	5	6	11	1,967	963			4
SM-199	sewage_treat	Count	3	7	30	262,500	86,625	1,178	2,341	12
	substation_ca	Count	1	7	25	1,000	275			0
	transln_ca	Length (ft)	13,590	8	-	3,346	0			0
SM-132	gas_oil_wells	Count	1	11	0	0	0	558	525	0
	Residential - Single Family Dwelling	Count	2	11	100	525	558			24
	Gas_Oil Production_Fields	Area (Acres)	204	6	0	0	0			0
SM-133	gas_oil_wells	Count	9	4	0	0	0	0	0	0
	Gas_Oil Production_Fields	Area (Acres)	1	7	0	0	0			0
	gas_oil_wells	Count	1	9	0	0	0			0
SM-134	gas_oil_wells	Count	1	9	0	0	0	0	0	0
	Commercial - Retail Trade	Count	2	12	47	4	3			17
	Delta Roads PBSJ Minor Roads	Length (ft)	5,019	12	25	1,004	276			6
SM-198	gas_oil_wells	Count	3	11	0	0	0	2,595	5,383	0
	Natural Gas Pipeline	Length (ft)	4,380	12	0	832	0			0
	Petroleum Pipelines	Length (ft)	5,484	12	0	1,152	0			0
SM-199	Rail HAZUS SDURS	Length (ft)	1,009	12	25	288	79	1,178	2,341	1
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	12	100	66	70			24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	12	100	72	77			24
SM-198	Residential - Single Family Dwelling	Count	7	12	100	1,966	2,090	1,178	2,341	24
	Communication HAZUS SDURS	Count	2	10	100	236	260			18
	Delta Roads PBSJ Minor Roads	Length (ft)	5,164	10	25	1,033	284			6
SM-199	Residential - Multi-Dwellings- 10 to 19 un	Count	2	10	50	30	18	1,178	2,341	24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	10	50	30	18			24
	Residential - Single Family Dwelling	Count	3	10	49	1,013	599			23

SM-202	Residential - Single Family Dwelling	Count	2	10	47	531	300	300	531	22
SM-39	Commercial - Professional/ Technical Se	Count	2	6	38	184	118	5,303	20,349	14
	Commercial - Retail Trade	Count	2	6	23	508	285			8
	Delta Roads PBSJ Major Roads	Length (ft)	4,675	6	25	1,543	424			6
	Delta Roads PBSJ Minor Roads	Length (ft)	17,230	6	25	3,446	948			6
	Hwy Bridge HAZUS SDURS	Count	4	4	25	8,000	2,200			3
	Rail HAZUS SDURS	Length (ft)	3,727	6	25	1,062	292			1
	Residential - Single Family Dwelling	Count	8	6	37	2,318	1,035			18
	transln_ca	Length (ft)	13,355	6	-	3,288	0			0
SM-40	Delta Roads PBSJ Minor Roads	Length (ft)	7,779	9	25	1,556	428	428	1,556	6
SM-41	Commercial - Professional/ Technical Se	Count	1	10	47	4	3	505	3,852	17
	Commercial - Retail Trade	Count	1	10	34	72	45			12
	Delta Roads PBSJ Minor Roads	Length (ft)	373	10	25	75	21			6
	Petroleum Pipelines	Length (ft)	10,067	10	0	2,114	0			0
	Rail HAZUS SDURS	Length (ft)	5,569	10	25	1,587	436			1
SM-42	substation_ca	Count	1	7	25	1,000	275	275	1,753	0
	transln_ca	Length (ft)	3,060	7	-	753	0			0
SM-43	Gas Oil Production Fields	Area (Acres)	95	9	0	0	0	266	504	0
	gas oil wells	Count	6	5	0	0	0			0
	Residential - Single Family Dwelling	Count	2	9	44	504	266			21
SM-44	Delta Roads PBSJ Minor Roads	Length (ft)	15,129	8	25	3,026	832	2,234	7,267	6
	Residential - Single Family Dwelling	Count	10	8	39	2,923	1,402			19
	transln_ca	Length (ft)	5,355	8	-	1,318	0			0
SM-46	Commercial - Retail Trade	Count	1	10	38	6	4	133	474	14
	Delta Roads PBSJ Minor Roads	Length (ft)	2,339	10	25	468	129			6
SM-47	solid waste facilities	Count	1	8	25	0	0	0	0	0
SM-48	Commercial - Entertainment and Recrea	Count	1	10	26	15,004	8,747	31,290	56,869	9
	Commercial - Professional/ Technical Se	Count	1	10	47	1,832	1,280			17
	Commercial - Retail Trade	Count	2	10	34	32,612	20,448			12
	gas oil wells	Count	2	9	0	0	0			0
	Petroleum Pipelines	Length (ft)	21,217	10	0	4,456	0			0
	Rail HAZUS SDURS	Length (ft)	10,405	10	25	2,965	815			1
SM-49	Commercial - Entertainment and Recrea	Count	2	9	26	16,404	9,564	50,892	91,100	9
	Commercial - Professional/ Technical Se	Count	2	9	47	16,552	11,562			17
	Commercial - Retail Trade	Count	2	9	34	18,076	11,334			12
	Commercial - Wholesale Trade	Count	3	9	29	12,408	7,439			10
	Delta Roads PBSJ Minor Roads	Length (ft)	22,129	9	25	4,426	1,217			6
	Hwy HAZUS SDURS	Length (ft)	3,040	9	25	1,003	276			3
	Industrial - Light	Count	2	9	37	11,685	6,684			13
	Petroleum Pipelines	Length (ft)	19,582	9	0	4,112	0			0
	Rail HAZUS SDURS	Length (ft)	9,852	9	25	2,808	772			1
	Residential - Single Family Dwelling	Count	12	9	47	3,626	2,045			22
SM-51	Gas Oil Production Fields	Area (Acres)	3	8	0	0	0	0	0	0
SM-52	Commercial - Retail Trade	Count	2	7	26	252	147	2,307	7,403	9
	Delta Roads PBSJ Minor Roads	Length (ft)	9,912	7	25	1,982	545			6
	Gas Oil Production Fields	Area (Acres)	192	7	0	0	0			0
	gas oil wells	Count	8	8	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	5	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	686	7	25	226	62			3
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	7	43	9	5			21
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	7	43	9	5			21
SM-53	Residential - Single Family Dwelling	Count	4	7	39	924	443	2,307	7,403	19
	Commercial - Retail Trade	Count	1	5	18	56	29			6

SM-54	Delta Roads PBSJ Minor Roads	Length (ft)	53	5	25	11	3	33	70	6
	Gas Oil Production Fields	Area (Acres)	180	5	0	0	0			0
	gas oil wells	Count	3	4	0	0	0			0
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	5	29	2	1			14
	Residential - Multi-Dwellings- 20 to 49 un	Count	1	5	29	2	1			14
	Commercial - Personal and Repair Servi	Count	3	8	28	1,878	1,116			10
	Commercial - Professional/ Technical Se	Count	2	8	44	22,064	15,048			16
	Commercial - Retail Trade	Count	2	8	30	21,268	12,867			11
	Commercial - Wholesale Trade	Count	7	8	25	35,342	20,410			9
	Delta Roads PBSJ Major Roads	Length (ft)	3,187	8	25	1,052	289			6
	Delta Roads PBSJ Minor Roads	Length (ft)	37,086	8	25	7,417	2,040			6
	gas oil wells	Count	5	8	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	4	6	25	8,000	2,200			3
	Hwy HAZUS SDURS	Length (ft)	3,020	8	25	997	274			3
	Industrial - Construction	Count	3	8	100	13,320	11,722			18
	Industrial - Heavy	Count	4	8	35	35,857	19,721			13
	Natural Gas Pipeline	Length (ft)	460	8	0	87	0			0
	Petroleum Pipelines	Length (ft)	48,353	8	0	10,154	0			0
	rail 1000 nodes	Count	7	5	-	0	0			0
	Rail Facility HAZUS SDRUS	Count	2	3	25	5,145	1,415			0
	Rail HAZUS SDURS	Length (ft)	50,708	8	25	14,452	3,974			1
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	8	46	18	10			22
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	8	46	9	5			22
	Residential - Single Family Dwelling	Count	12	8	44	3,524	1,861			21
	solid waste facilities	Count	2	4	25	0	0	92,951	180,583	0
SM-55	Delta Roads PBSJ Minor Roads	Length (ft)	18,625	13	25	3,725	1,024	1,926	6,345	6
	Natural Gas Pipeline	Length (ft)	4,433	13	0	842	0			0
	Petroleum Pipelines	Length (ft)	4,424	13	0	929	0			0
	Residential - Single Family Dwelling	Count	3	13	100	848	902			24
SM-56	Delta Roads PBSJ Minor Roads	Length (ft)	7,016	9	25	1,403	386	1,190	4,436	6
	gas oil wells	Count	2	8	0	0	0			0
	Natural Gas Pipeline	Length (ft)	5,029	9	0	956	0			0
	Petroleum Pipelines	Length (ft)	3,101	9	0	651	0			0
SM-57	Residential - Single Family Dwelling	Count	4	9	47	1,426	804	6,301	21,774	22
	bridges not in HAZUS	Count	2	4	25	2,000	550			3
	Delta Roads PBSJ Major Roads	Length (ft)	37	6	25	12	3			6
	Delta Roads PBSJ Minor Roads	Length (ft)	12,785	6	25	2,557	703			6
	hlc ambulatory	Count	3	4	14	0	0			5
	Hwy Bridge HAZUS SDURS	Count	2	5	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	2,242	6	25	740	203			3
	Natural Gas Pipeline	Length (ft)	5,916	6	0	1,124	0			0
	Residential - Single Family Dwelling	Count	25	6	37	8,376	3,741			18
	solid waste facilities	Count	2	6	25	0	0			0
	transln ca	Length (ft)	12,040	6	-	2,964	0			0
	water trans	Count	2	4	-	0	0			0
SM-58	Delta Roads PBSJ Minor Roads	Length (ft)	3,841	9	25	768	211	211	768	6
SM-59	Delta Roads PBSJ Minor Roads	Length (ft)	377	7	25	75	21	673	2,091	6
	Gas Oil Production Fields	Area (Acres)	275	7	0	0	0			0
	gas oil wells	Count	9	6	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	4,382	7	25	1,446	398			3
	Residential - Single Family Dwelling	Count	2	7	37	570	255			18
SM-60	Commercial - Entertainment and Recrea	Count	2	6	16	22,628	11,699			6
	Commercial - Personal and Repair Servi	Count	2	6	19	10,016	5,344			7

	Commercial - Professional/ Technical Se	Count	2	6	35	6,792	4,221	24,216	47,556	13
	Commercial - Retail Trade	Count	2	6	20	2,424	1,307			7
	Delta Roads PBSJ Minor Roads	Length (ft)	5,186	6	25	1,037	285			6
	gas oil wells	Count	3	3	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	10	25	4,000	1,100			3
SM-84	Residential - Single Family Dwelling	Count	3	6	33	659	261	9,361	19,901	16
	Commercial - Retail Trade	Count	2	11	42	324	217			15
	Delta Roads PBSJ Minor Roads	Length (ft)	74,035	11	25	14,807	4,072			6
	Gas Oil Production Fields	Area (Acres)	10	11	0	0	0			0
	gas oil wells	Count	9	10	0	0	0			0
SM-85-Grizzly_Island	Residential - Single Family Dwelling	Count	15	11	100	4,770	5,072	4,464	20,272	24
	Delta Roads PBSJ Minor Roads	Length (ft)	58,489	9	25	11,698	3,217			6
	Gas Oil Production Fields	Area (Acres)	190	9	0	0	0			0
	gas oil wells	Count	12	8	0	0	0			0
	Natural Gas Pipeline	Length (ft)	30,135	9	0	5,726	0			0
Smith_Tract	Petroleum Pipelines	Length (ft)	2,326	9	0	488	0	551,116	1,401,180	0
	Residential - Single Family Dwelling	Count	7	9	44	2,360	1,247			21
	Commercial - Entertainment and Recrea	Count	5	5	16	7,726	3,952			6
	Commercial - Personal and Repair Servi	Count	5	5	19	11,508	6,076			7
	Commercial - Professional/ Technical Se	Count	1	5	35	4,708	2,900			13
Stark_Tract	Commercial - Retail Trade	Count	1	5	20	12,350	6,589	1,876	7,984	7
	Delta Roads PBSJ Major Roads	Length (ft)	19,013	5	25	6,274	1,725			6
	Delta Roads PBSJ Minor Roads	Length (ft)	218,779	5	25	43,756	12,033			6
	hc ambulatory	Count	6	5	14	0	0			5
	hc nursing res	Count	1	10	23	0	0			11
Staten_Island	Hwy Bridge HAZUS SDURS	Count	9	3	25	18,000	4,950	12,812	43,993	3
	Hwy HAZUS SDURS	Length (ft)	6,636	5	25	2,190	602			3
	Religion - Churches and other Non-Profit	Count	1	5	12	4,602	2,177			4
	Residential - Duplex	Count	31	5	32	14,154	5,532			15
	Residential - Manuf. Housing	Count	14	5	100	909	920			24
	Residential - Multi-Dwellings - 10 to 19 u	Count	3	5	32	72,285	28,254	12,812	43,993	15
	Residential - Multi-Dwellings - 20 to 49 u	Count	1	5	32	68,052	26,599			15
	Residential - Multi-Dwellings - 5 to 9 units	Count	3	5	32	17,250	6,742			15
	Residential - Multi-Dwellings - 50+ units	Count	3	5	32	54,713	21,385			15
	Residential - Multi-Dwellings- 10 to 19 un	Count	3	5	32	15,125	5,912			15
	Residential - Single Family Dwelling	Count	4,093	5	33	1,030,175	407,383	12,812	43,993	16
	Residential - Triplex-Quads	Count	10	5	32	10,325	4,036			15
	Schools HAZUS SDURS	Count	6	6	10	7,080	3,349			4
	Delta Roads PBSJ Minor Roads	Length (ft)	1,602	10	25	320	88			6
	gas oil wells	Count	1	11	0	0	0			0
	Natural Gas Pipeline	Length (ft)	4,944	10	0	939	0	12,812	43,993	0
	Residential - Single Family Dwelling	Count	12	10	49	3,024	1,788			23
	transln_ca	Length (ft)	15,027	10	-	3,700	0			0
	Commercial - Retail Trade	Count	3	27	100	738	812			18
	Delta Roads PBSJ Major Roads	Length (ft)	4,422	27	25	1,459	401			6
	Delta Roads PBSJ Minor Roads	Length (ft)	132,282	27	25	26,456	7,276	12,812	43,993	6
	Gas Oil Production Fields	Area (Acres)	1,623	27	0	0	0			0
	gas oil wells	Count	34	25	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	25	25	6,000	1,650			3
	Natural Gas Pipeline	Length (ft)	26,159	27	0	6,801	0			0
	Natural Gas Wells	Count	4	22	-	0	0	12,812	43,993	0
	Residential - Manuf. Housing	Count	21	27	100	986	1,023			24
	Residential - Single Family Dwelling	Count	9	27	100	1,553	1,651			24

Stewart_Tract	Commercial - Professional/ Technical Se	Count	1	9	44	338	231	17,981	53,788	16
	Commercial - Retail Trade	Count	1	9	30	1,150	696			11
	Delta Roads PBSJ Minor Roads	Length (ft)	61,566	9	25	12,313	3,386			6
	gas oil wells	Count	7	9	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	6	9	25	12,000	3,300			3
	Hwy HAZUS SDURS	Length (ft)	7,635	9	25	2,520	693			3
	Rail HAZUS SDURS	Length (ft)	4,671	9	25	1,331	366			1
	Residential - Manuf. Housing	Count	13	9	100	702	726			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	1	9	46	228	124			22
	Residential - Single Family Dwelling	Count	62	9	44	16,019	8,461			21
	transln_ca	Length (ft)	29,192	9	-	7,187	0			0
Sutter Island	Delta Roads PBSJ Major Roads	Length (ft)	3,515	17	25	1,160	319	15,774	26,334	6
	Delta Roads PBSJ Minor Roads	Length (ft)	63,251	17	25	12,650	3,479			6
	Gas Oil Production Fields	Area (Acres)	28	7	0	0	0			0
	Gas Oil Production Fields	Area (Acres)	657	20	0	0	0			0
	gas oil wells	Count	5	17	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	5,146	17	25	1,698	467			3
	Residential - Manuf. Housing	Count	2	17	100	60	62			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	1	17	100	510	542			24
	Residential - Single Family Dwelling	Count	38	17	100	10,256	10,905			24
Terminous_Tract 1	Commercial - Professional/ Technical Se	Count	4	6	38	16	10	20,244	66,440	14
	Commercial - Retail Trade	Count	4	6	23	2,512	1,409			8
	Delta Roads PBSJ Major Roads	Length (ft)	11,549	6	25	3,811	1,048			6
	Delta Roads PBSJ Minor Roads	Length (ft)	58,842	6	25	11,768	3,236			6
	gas oil wells	Count	5	6	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	12	6	25	24,000	6,600			3
	Hwy HAZUS SDURS	Length (ft)	15,541	6	25	5,129	1,410			3
	Natural Gas Pipeline	Length (ft)	651	6	0	150	0			0
	Residential - Manuf. Housing	Count	46	6	100	2,415	2,462			24
	Residential - Single Family Dwelling	Count	23	6	37	4,226	1,887			18
	Schools HAZUS SDURS	Count	4	5	10	4,720	2,181			4
	transln_ca	Length (ft)	31,244	6	-	7,693	0			0
Terminous_Tract 2	Agriculture	Count	5	22	100	11,350	10,737	193,264	260,806	18
	Boatlaunch	Count	5	26	100	500	550			0
	Commercial - Professional/ Technical Se	Count	5	22	100	860	946			18
	Commercial - Retail Trade	Count	5	22	100	6,410	7,051			18
	Commercial - Wholesale Trade	Count	5	22	100	20,310	22,341			18
	Delta Roads PBSJ Major Roads	Length (ft)	3,608	22	25	1,191	327			6
	Delta Roads PBSJ Minor Roads	Length (ft)	419,696	22	25	83,939	23,083			6
	gas oil wells	Count	21	21	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	5	17	25	10,000	2,750			3
	Hwy HAZUS SDURS	Length (ft)	24,236	22	25	7,998	2,199			3
	Natural Gas Wells	Count	1	18	-	0	0			0
	Residential - Duplex	Count	9	22	100	3,848	4,091			24
	Residential - Manuf. Housing	Count	859	22	100	43,998	45,655			24
	Residential - Single Family Dwelling	Count	337	22	100	69,152	73,532			24
	US cell towers	Count	5	23	-	1,250	0			1
Terminous_Tract 3	Delta Roads PBSJ Minor Roads	Length (ft)	1,060	11	25	212	58	2,988	4,050	6
	Residential - Manuf. Housing	Count	30	11	100	1,479	1,534			24
	Residential - Single Family Dwelling	Count	13	11	49	2,360	1,395			23
Twitchell_Island	Delta Roads PBSJ Minor Roads	Length (ft)	42,409	24	25	8,482	2,332			6
	Gas Oil Production Fields	Area (Acres)	2,199	24	0	0	0			0
	gas oil wells	Count	35	23	0	0	0			0

	Natural Gas Pipeline	Length (ft)	8,804	24	0	2,025	0			0
	Natural Gas Wells	Count	19	24	-	0	0			0
	Residential - Duplex	Count	2	24	100	792	842			24
	Residential - Manuf. Housing	Count	45	24	100	2,324	2,411			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	24	100	141	150			24
	Residential - Single Family Dwelling	Count	39	24	100	8,054	8,564			24
	Residential - Triplex-Quads	Count	2	24	100	588	625	14,925	22,405	24
Tyler_Island 2	Airports HAZUS SDURS	Count	1	23	25	6,431	1,769			3
	Delta Roads PBSJ Major Roads	Length (ft)	5,160	23	25	1,703	468			6
	Delta Roads PBSJ Minor Roads	Length (ft)	167,781	23	25	33,556	9,228			6
	Gas Oil Production Fields	Area (Acres)	4,216	23	0	0	0			0
	gas oil wells	Count	96	23	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	1	17	25	2,000	550			3
	Natural Gas Pipeline	Length (ft)	35,510	23	0	7,457	0			0
	Natural Gas Wells	Count	13	26	-	0	0			0
	Residential - Manuf. Housing	Count	2	23	100	245	254			24
	Residential - Single Family Dwelling	Count	17	23	100	4,800	5,104			24
	Runway HAZUS SDURS	Count	1	9	25	36,674	10,085			0
	solid waste facilities	Count	1	10	25	0	0	27,458	92,866	0
	Dams HAZUS SDURS	Count	1	18	0	0	0			0
	Delta Roads PBSJ Major Roads	Length (ft)	50,137	15	25	16,545	4,550			6
Union_Island 1	Delta Roads PBSJ Minor Roads	Length (ft)	458,101	15	25	91,620	25,196			6
	Gas Oil Production Fields	Area (Acres)	2,959	15	0	0	0			0
	gas oil wells	Count	51	12	0	0	0			0
	Natural Gas Pipeline	Length (ft)	63,468	15	0	12,059	0			0
	Natural Gas Wells	Count	15	11	-	0	0			0
	Residential - Duplex	Count	7	15	100	2,996	3,186			24
	Residential - Institutional and Dormitory	Count	9	15	42	54,324	31,233			20
	Residential - Manuf. Housing	Count	41	15	100	1,790	1,857			24
	Residential - Single Family Dwelling	Count	160	15	100	40,525	43,091			24
	Schools HAZUS SDURS	Count	3	15	45	3,540	2,512			16
	transln ca	Length (ft)	123,471	15	-	30,400	0			0
	US cell towers	Count	3	15	-	750	0	111,624	254,549	1
	Delta Roads PBSJ Minor Roads	Length (ft)	1,163	7	25	233	64			6
	Gas Oil Production Fields	Area (Acres)	1	7	0	0	0			0
Union_Island 2	Natural Gas Pipeline	Length (ft)	2,583	7	0	491	0	64	723	0
	Delta Roads PBSJ Minor Roads	Length (ft)	8,039	10	25	1,608	442			6
Union_Island 3	gas oil wells	Count	4	10	0	0	0			0
	Natural Gas Pipeline	Length (ft)	6,943	10	0	1,319	0			0
	Residential - Single Family Dwelling	Count	4	10	47	1,077	608			22
	transln ca	Length (ft)	16,119	10	-	3,969	0	1,050	7,973	0
Union_Island 4	Delta Roads PBSJ Minor Roads	Length (ft)	6,881	7	25	1,376	378			6
	Gas Oil Production Fields	Area (Acres)	70	7	0	0	0			0
	gas oil wells	Count	3	6	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,029	7	0	196	0	378	1,572	0
Upper_Roberts_Island	Delta Roads PBSJ Minor Roads	Length (ft)	343,299	7	25	68,660	18,881			6
	Gas Oil Production Fields	Area (Acres)	1,279	7	0	0	0			0
	gas oil wells	Count	32	7	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	3	8	25	6,000	1,650			3
	Natu Gas HAZUS SDURS	Count	1	9	0	1,286	0			0
	Natural Gas Pipeline	Length (ft)	21,809	7	0	4,144	0			0
	Natural Gas Wells	Count	18	7	-	0	0			0
	Residential - Manuf. Housing	Count	10	7	100	604	618			24

Van_Sickle_Island	Residential - Single Family Dwelling	Count	118	7	37	30,636	13,682	34,831	126,303	18
	transIn_ca	Length (ft)	60,815	7	-	14,973	0			0
	Gas_Oil_Production_Fields	Area (Acres)	293	12	0	0	0			0
	gas_oil_wells	Count	16	13	0	0	0			0
Veale_Tract 1	Residential - Single Family Dwelling	Count	3	12	100	810	861	33,861	100,810	24
	sewage_treat	Count	1	12	30	100,000	33,000			12
	Commercial - Professional/ Technical Se	Count	1	12	100	336	333			18
	Commercial - Retail Trade	Count	1	12	42	104	70			15
Veale_Tract 2	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	7,134	12	25	1,427	392	13,476	21,937	6
	Gas_Oil_Production_Fields	Area (Acres)	85	12	0	0	0			0
	gas_oil_wells	Count	6	12	0	0	0			0
	Residential - Manuf. Housing	Count	6	12	100	320	332			24
Veale_Tract 2	Residential - Single Family Dwelling	Count	37	12	100	11,615	12,350	41,015	120,408	24
	transIn_ca	Length (ft)	25,269	12	-	8,136	0			0
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	2,270	8	25	454	125			6
	Natural Gas Pipeline	Length (ft)	8	8	0	2	0			0
Venice_Island	Residential - Institutional and Dormitory	Count	20	8	18	107,550	34,939	3,705	13,308	9
	Residential - Single Family Dwelling	Count	39	8	39	12,402	5,950			19
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	66,239	29	25	13,248	3,643			6
	gas_oil_wells	Count	4	31	0	0	0			0
Victoria_Island	Residential - Manuf. Housing	Count	2	29	100	60	62	37,778	57,078	24
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	67,412	22	25	13,482	3,708			6
	gas_oil_wells	Count	2	23	0	0	0			0
	Hwy_HAZUS_SDURS	Length (ft)	23,053	22	25	7,607	2,092			3
Walnut_Grove	Natural Gas Pipeline	Length (ft)	9,171	22	0	1,742	0	74,612	80,533	0
	Residential - Institutional and Dormitory	Count	5	22	100	28,835	30,661			24
	Residential - Manuf. Housing	Count	1	22	100	45	47			24
	Residential - Single Family Dwelling	Count	3	22	100	1,196	1,271			24
Walnut_Grove	transIn_ca	Length (ft)	12,954	22	-	4,171	0	34,346	69,632	0
	Commercial - Professional/ Technical Se	Count	2	15	100	1,108	1,219			18
	Commercial - Retail Trade	Count	2	15	100	576	634			18
	Communication HAZUS_SDURS	Count	5	19	100	590	649			18
Walthal_Tract	Delta_Roads_PBSJ_Major_Roads	Length (ft)	3,282	15	25	1,083	298	34,346	69,632	6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	34,909	15	25	6,982	1,920			6
	Gas_Oil_Production_Fields	Area (Acres)	285	15	0	0	0			0
	gas_oil_wells	Count	5	18	0	0	0			0
Walthal_Tract	hc_ambulatory	Count	2	6	16	0	0	34,346	69,632	6
	Hwy_Bridge_HAZUS_SDURS	Count	3	14	25	6,000	1,650			3
	Residential - Duplex	Count	21	15	100	8,915	9,479			24
	Residential - Manuf. Housing	Count	11	15	100	653	678			24
Walthal_Tract	Residential - Single Family Dwelling	Count	205	15	100	54,627	58,086	34,346	69,632	24
	Commercial - Retail Trade	Count	2	10	34	156	98			12
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	9,300	10	25	3,069	844			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	46,294	10	25	9,259	2,546			6
Walthal_Tract	Gas_Oil_Production_Fields	Area (Acres)	690	10	0	0	0	34,346	69,632	0
	gas_oil_wells	Count	11	10	0	0	0			0
	Hwy_Bridge_HAZUS_SDURS	Count	2	15	25	4,000	1,100			3
	Natural Gas Pipeline	Length (ft)	2,033	10	0	661	0			0
Walthal_Tract	Natural Gas Wells	Count	2	9	-	0	0	34,346	69,632	0
	Residential - Manuf. Housing	Count	51	10	100	2,673	2,764			24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	10	48	87	50			23
	Residential - Single Family Dwelling	Count	181	10	47	47,762	26,943			22
Walthal_Tract	transIn_ca	Length (ft)	7,981	10	-	1,965	0	34,346	69,632	0

Water Body	Delta Roads PBSJ Minor Roads	Length (ft)	1	14	25	0	0	0	0	6
Water Canal	Gas Oil Production Fields	Area (Acres)	87	11	0	0	0	0	0	0
	gas oil wells	Count	4	9	0	0	0	0	0	0
	Natural Gas Pipeline	Length (ft)	1,178	11	0	224	0	0	224	0
Water Zone 1	Boatlaunch	Count	14	14	100	1,400	1,540	0	0	0
	bridges not in HAZUS	Count	11	26	25	11,000	3,025	0	0	3
	Commercial - Entertainment and Recrea	Count	11	12	37	21,919	14,105	0	0	13
	Commercial - Personal and Repair Servi	Count	2	12	43	7,960	5,385	0	0	15
	Commercial - Professional/ Technical Se	Count	2	12	100	46,208	45,746	0	0	18
	Commercial - Retail Trade	Count	2	12	47	19,724	13,777	0	0	17
	Commercial - Wholesale Trade	Count	5	12	41	28,790	19,160	0	0	15
	Delta Roads PBSJ Major Roads	Length (ft)	71,911	12	25	23,731	6,526	0	0	6
	Delta Roads PBSJ Minor Roads	Length (ft)	257,700	12	25	51,540	14,174	0	0	6
	Fire Stations SDURS	Count	2	1	7	3,540	927	0	0	3
	Gas Oil Production Fields	Area (Acres)	2,780	12	0	0	0	0	0	0
	gas oil wells	Count	31	11	0	0	0	0	0	0
	Government - General Services	Count	2	12	40	6,530	4,770	0	0	14
	Hazmat HAZUS SDURS	Count	4	24	-	0	0	0	0	0
	hc ambulatory	Count	2	6	17	0	0	0	0	6
	Hwy Bridge HAZUS SDURS	Count	5	22	25	10,000	2,750	0	0	3
	Hwy HAZUS SDURS	Length (ft)	92,588	12	25	30,554	8,402	0	0	3
	Industrial - Heavy	Count	2	12	50	11,670	7,497	0	0	18
	Natural Gas Pipeline	Length (ft)	59,976	12	0	16,793	0	0	0	0
	Petroleum Pipelines	Length (ft)	5,369	12	0	1,127	0	0	0	0
	Police Stations HAZUS SDURS	Count	2	1	7	8,260	2,162	0	0	3
	Port HAZUS SDURS	Count	10	26	0	25,724	0	0	0	0
	rail 1000 nodes	Count	4	24	-	0	0	0	0	0
	Rail HAZUS SDURS	Length (ft)	9,756	12	25	2,780	765	0	0	1
	Residential - Duplex	Count	2	12	100	4,626	4,919	0	0	24
	Residential - Institutional and Dormitory	Count	2	12	34	22,521	11,346	0	0	16
	Residential - Manuf. Housing	Count	78	12	100	4,292	4,454	0	0	24
	Residential - Multi-Dwellings - 5 to 9 unit	Count	2	12	100	10,074	10,712	0	0	24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	12	100	1,668	1,774	0	0	24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	12	100	5,361	5,701	0	0	24
	Residential - Single Family Dwelling	Count	464	12	100	128,996	137,165	0	0	24
	Residential - Triplex-Quads	Count	3	12	100	4,084	4,342	0	0	24
	Schools HAZUS SDURS	Count	2	2	5	2,360	623	0	0	2
	sewage treat	Count	2	28	30	150,000	49,500	0	0	12
	substation ca	Count	6	11	25	6,000	1,650	0	0	0
	tankfarms	Count	2	32	-	6,000	0	0	0	0
	transln_ca	Length (ft)	44,972	12	-	11,073	0	382,896	686,306	0
Water Zone 2	Boatlaunch	Count	14	9	100	1,400	1,540	0	0	0
	bridges not in HAZUS	Count	6	11	25	6,000	1,650	0	0	3
	Commercial - Entertainment and Recrea	Count	2	10	29	2,644	1,585	0	0	10
	Commercial - Medical Clinics	Count	2	10	24	5,075	3,216	0	0	9
	Commercial - Personal and Repair Servi	Count	2	10	35	8,004	5,063	0	0	13
	Commercial - Professional/ Technical Se	Count	2	10	50	26,192	18,727	0	0	18
	Commercial - Retail Trade	Count	2	10	38	10,760	6,983	0	0	14
	Delta Roads PBSJ Major Roads	Length (ft)	635	10	25	210	58	0	0	6
	Delta Roads PBSJ Minor Roads	Length (ft)	91,624	10	25	18,325	5,039	0	0	6
	Gas Oil Production Fields	Area (Acres)	2,499	10	0	0	0	0	0	0
	gas oil wells	Count	40	8	0	0	0	0	0	0
	gas pipeline kinder morgan LS 9	Length (ft)	818	10	0	172	0	0	0	0

	Hwy Bridge HAZUS SDURS	Count	6	9	25	12,000	3,300				3
	Hwy HAZUS SDURS	Length (ft)	12,764	10	25	4,212	1,158				3
	mokelumne aqueduct pipe	Length (ft)	2,615	10	0	13,075	0				0
	Natural Gas Pipeline	Length (ft)	39,494	10	0	7,504	0				0
	Natural Gas Wells	Count	1	7	-	0	0				0
	Petroleum Pipelines	Length (ft)	95,126	10	0	19,976	0				0
	Port HAZUS SDURS	Count	18	10	0	46,303	0				0
	rail 1000 nodes	Count	7	10	-	0	0				0
	Rail Bridge HAZUS SDURS	Count	2	11	25	2,000	550				1
	Rail HAZUS SDURS	Length (ft)	34,231	10	25	9,756	2,683				1
	Religion - Churches and other Non-Profit	Count	2	10	17	5,716	3,175				6
	Residential - Duplex	Count	3	10	50	3,272	1,955				24
	Residential - Institutional and Dormitory	Count	2	10	26	13,323	5,667				12
	Residential - Manuf. Housing	Count	36	10	100	2,077	2,155				24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	10	50	1,677	1,002				24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	10	50	2,457	1,468				24
	Residential - Single Family Dwelling	Count	1,163	10	49	425,953	251,844				23
	Residential - Triplex-Quads	Count	2	10	50	2,061	1,232				24
	sewage treat	Count	5	10	30	1,037,500	342,375				12
	substation ca	Count	2	11	25	2,000	550				0
	transln ca	Length (ft)	34,667	10	-	8,535	0				0
	water_trans	Count	2	4	-	0	0	662,976	1,698,178		0
Water Zone 3	air trans	Count	2	10	-	0	0				0
	Boatlaunch	Count	9	9	100	900	990				0
	bridges not in HAZUS	Count	2	11	25	2,000	550				3
	Commercial - Professional/ Technical Se	Count	2	10	50	4,164	2,977				18
	Commercial - Retail Trade	Count	2	10	38	972	631				14
	Delta Roads PBSJ Major Roads	Length (ft)	5,123	10	25	1,691	465				6
	Delta Roads PBSJ Minor Roads	Length (ft)	86,042	10	25	17,208	4,732				6
	Gas Oil Production Fields	Area (Acres)	841	10	0	0	0				0
	gas oil wells	Count	5	11	0	0	0				0
	Hwy Bridge HAZUS SDURS	Count	8	9	25	16,000	4,400				3
	Hwy HAZUS SDURS	Length (ft)	3,508	10	25	1,158	318				3
	Natural Gas Pipeline	Length (ft)	7,115	10	0	1,636	0				0
	rail 1000 nodes	Count	2	5	-	0	0				0
	Rail HAZUS SDURS	Length (ft)	187	10	25	53	15				1
	Residential - Duplex	Count	2	10	50	2,241	1,339				24
	Residential - Manuf. Housing	Count	69	10	100	3,790	3,933				24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	10	50	225	134				24
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	10	50	45	27				24
	Residential - Single Family Dwelling	Count	173	10	49	48,642	28,760				23
	Residential - Triplex-Quads	Count	2	10	50	1,002	599				24
	sewage treat	Count	2	17	30	170,000	56,100				12
	transln ca	Length (ft)	5,952	10	-	1,465	0				0
	water_trans	Count	2	10	-	0	0	105,970	273,193		0
Water Zone 4	Airport Points	Count	2	6	25	0	0				0
	Boatlaunch	Count	4	7	100	400	440				0
	Commercial - Entertainment and Recrea	Count	2	10	26	3,536	2,061				9
	Commercial - Personal and Repair Servi	Count	6	10	32	14,177	8,733				12
	Commercial - Professional/ Technical Se	Count	2	10	47	23,460	16,387				17
	Commercial - Retail Trade	Count	2	10	34	3,072	1,926				12
	Commercial - Wholesale Trade	Count	2	10	29	6,280	3,765				10
	Delta Roads PBSJ Minor Roads	Length (ft)	92,791	10	25	18,558	5,104				6

	Gas Oil Production Fields	Area (Acres)	136	10	0	0	0	0	0
	gas_oil_wells	Count	2	10	0	0	0	0	0
	gas_pipeline_kinder_morgan_LS_9	Length (ft)	2,097	10	0	440	0	0	0
	Hwy_Bridge_HAZUS_SDURS	Count	4	11	25	8,000	2,200	3	3
	Hwy_HAZUS_SDURS	Length (ft)	7,758	10	25	2,560	704	0	0
	mokelumne_aqueduct_pipe	Length (ft)	8,378	10	0	41,890	0	0	0
	Natural Gas Pipeline	Length (ft)	21,265	10	0	4,040	0	0	0
	Rail_HAZUS_SDURS	Length (ft)	2,955	10	25	842	232	1	1
	Residential - Duplex	Count	6	10	48	2,786	1,600	23	23
	Residential - Manuf. Housing	Count	5	10	100	356	368	24	24
	Residential - Multi-Dwellings - 5 to 9 units	Count	2	10	48	6,408	3,679	23	23
	Residential - Multi-Dwellings- 10 to 19 units	Count	2	10	48	3,168	1,819	23	23
	Residential - Multi-Dwellings- 20 to 49 units	Count	2	10	48	1,452	834	23	23
	Residential - Single Family Dwelling	Count	211	10	47	60,543	34,153	22	22
	Residential - Triplex-Quads	Count	5	10	48	2,580	1,481	23	23
	sewage_treat	Count	2	11	30	0	0	12	12
	transIn_ca	Length (ft)	8,997	10	-	2,897	0	85,486	207,446
Water Zone 5	bridges_not_in_HAZUS	Count	2	7	25	2,000	550	3	3
	Commercial - Professional/ Technical Services	Count	2	12	100	1,308	1,295	18	18
	Commercial - Retail Trade	Count	2	12	42	3,564	2,391	15	15
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	4,502	12	25	1,486	409	6	6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	61,223	12	25	12,245	3,367	6	6
	Gas_Oil_Production_Fields	Area (Acres)	153	12	0	0	0	0	0
	gas_oil_wells	Count	4	10	0	0	0	0	0
	Government - General Services	Count	2	12	35	4,560	3,230	13	13
	Hwy_Bridge_HAZUS_SDURS	Count	9	11	25	18,000	4,950	3	3
	Hwy_HAZUS_SDURS	Length (ft)	2,402	12	25	793	218	3	3
	Natural Gas Pipeline	Length (ft)	9,989	12	0	3,246	0	0	0
	Natural Gas Wells	Count	1	6	-	0	0	0	0
	Petroleum Pipelines	Length (ft)	1,469	12	0	308	0	0	0
	Rail_HAZUS_SDURS	Length (ft)	4,812	12	25	1,371	377	1	1
	Residential - Institutional and Dormitory Housing	Count	2	12	30	11,325	5,265	14	14
	Residential - Manuf. Housing	Count	12	12	100	763	791	24	24
	Residential - Multi-Dwellings- 10 to 19 units	Count	2	12	100	960	1,021	24	24
	Residential - Multi-Dwellings- 20 to 49 units	Count	2	12	100	1,479	1,573	24	24
	Residential - Single Family Dwelling	Count	250	12	100	70,241	74,690	24	24
	transIn_ca	Length (ft)	33,210	12	-	8,177	0	100,128	141,826
Webb_Tract	Gas_Oil_Production_Fields	Area (Acres)	83	27	0	0	0	0	0
	gas_oil_wells	Count	18	25	0	0	0	0	0
	Natural Gas Pipeline	Length (ft)	1,292	27	0	245	0	0	0
	Natural Gas Wells	Count	1	21	-	0	0	0	0
	Residential - Single Family Dwelling	Count	1	27	100	171	182	182	416
West Sacramento North	Agriculture	Count	3	14	100	14,388	13,611	18	18
	air_trans	Count	3	15	-	0	0	0	0
	Airport Points	Count	3	10	25	0	0	0	0
	Boatlaunch	Count	2	21	100	200	220	0	0
	bridges_not_in_HAZUS	Count	13	11	25	13,000	3,575	3	3
	Commercial - Banks	Count	7	14	40	11,850	9,124	14	14
	Commercial - Entertainment and Recreation	Count	42	14	45	67,404	53,755	16	16
	Commercial - Medical Clinics	Count	13	14	37	37,718	31,034	13	13
	Commercial - Personal and Repair Services	Count	69	14	50	162,066	133,704	18	18
	Commercial - Professional and Technical Services	Count	7	14	100	225,274	247,801	18	18
	Commercial - Retail Trade	Count	3	14	100	195,963	215,559	18	18

Commercial - Wholesale Trade	Count	105	14	49	482,846	395,692			18
Delta Roads PBSJ Major Roads	Length (ft)	98,688	14	25	32,567	8,956			6
Delta Roads PBSJ Minor Roads	Length (ft)	595,913	14	25	119,183	32,775			6
Government - Emergency Response	Count	2	14	100	11,480	11,618			18
Government - General Services	Count	5	14	48	13,246	10,141			17
Hazmat HAZUS SDURS	Count	21	6	-	0	0			0
hc ambulatory	Count	49	12	30	0	0			11
hc hospital	Count	3	22	100	0	0			18
hc nursing res	Count	5	14	42	0	0			20
Hwy Bridge HAZUS SDURS	Count	27	11	25	54,000	14,850			3
Hwy HAZUS SDURS	Length (ft)	44,711	14	25	14,755	4,058			3
Industrial - Construction	Count	14	14	100	55,082	50,895			18
Industrial - Food-Drug-Chemicals	Count	13	14	42	210,178	133,168			15
Industrial - Heavy	Count	13	14	100	88,393	78,564			18
Industrial - Light	Count	7	14	50	54,999	36,783			18
intermodal terminal facilities	Count	5	14	-	0	0			0
Natural Gas Pipeline	Length (ft)	38,321	14	0	9,963	0			0
Petroleum Pipelines	Length (ft)	33,587	14	0	7,053	0			0
pipeline trans	Count	1	1	-	0	0			0
Police Stations HAZUS SDURS	Count	2	5	15	8,260	4,579			5
Port HAZUS SDURS	Count	5	22	0	12,862	0			0
rail 1000 nodes	Count	21	10	-	0	0			0
Rail Bridge HAZUS SDURS	Count	6	8	25	6,000	1,650			1
Rail Facility HAZUS SDRUS	Count	6	19	100	15,434	16,978			0
Rail HAZUS SDURS	Length (ft)	69,909	14	25	19,924	5,479			1
Religion - Churches and other Non-Profit	Count	7	14	38	39,847	26,737			14
Residential - Duplex	Count	282	14	100	106,960	113,735			24
Residential - Institutional and Dormitory	Count	10	14	42	47,469	27,291			20
Residential - Manuf. Housing	Count	1,956	14	100	99,892	103,654			24
Residential - Multi-Dwellings - 10 to 19 u	Count	13	14	100	117,163	124,583			24
Residential - Multi-Dwellings - 20 to 49 u	Count	5	14	100	153,328	163,038			24
Residential - Multi-Dwellings - 5 to 9 units	Count	44	14	100	130,576	138,845			24
Residential - Multi-Dwellings - 50+ units	Count	2	14	100	177,576	188,822			24
Residential - Multi-Dwellings- 10 to 19 ur	Count	13	14	100	75,233	79,998			24
Residential - Nursing Home	Count	2	14	42	13,509	7,767			20
Residential - Single Family Dwelling	Count	7,053	14	100	1,524,052	1,620,575			24
Residential - Triplex-Quads	Count	152	14	100	68,837	73,197			24
Schools HAZUS SDURS	Count	9	13	28	10,620	6,542			10
sewage treat	Count	2	34	30	200,000	66,000			12
solid waste facilities	Count	7	6	25	0	0			0
substation_ca	Count	1	15	25	1,000	275			0
tankfarms	Count	3	1	-	9,000	0			0
transln_ca	Length (ft)	39,060	14	-	9,617	0			0
utilities	Count	1	14	-	0	0			0
Waste Water HAZUS SDURS	Count	3	2	20	235,764	51,868			12
water_trans	Count	6	15	-	0	0	4,307,499	4,964,528	0
West Sacramento South 1									
air trans	Count	2	15	-	0	0			0
bridges not in HAZUS	Count	2	8	25	2,000	550			3
Commercial - Personal and Repair Servi	Count	4	15	100	7,840	8,624			18
Commercial - Professional/ Technical Se	Count	2	15	100	15,072	16,579			18
Commercial - Retail Trade	Count	2	15	100	13,500	14,850			18
Commercial - Wholesale Trade	Count	3	15	100	15,147	16,662			18
Communication HAZUS SDURS	Count	3	16	100	354	389			18

	Delta Roads PBSJ Major Roads	Length (ft)	52,501	15	25	17,325	4,764	794,935	816,905	6
	Delta Roads PBSJ Minor Roads	Length (ft)	240,654	15	25	48,131	13,236			6
	Gas Oil Production Fields	Area (Acres)	145	15	0	0	0			0
	gas oil wells	Count	24	15	0	0	0			0
	hc ambulatory	Count	3	14	37	0	0			13
	hc nursing res	Count	2	18	100	0	0			24
	Hwy HAZUS SDURS	Length (ft)	24,906	15	25	8,219	2,260			3
	Petroleum Pipelines	Length (ft)	29,561	15	0	6,208	0			0
	Rail Bridge HAZUS SDURS	Count	2	8	25	2,000	550			1
	Rail HAZUS SDURS	Length (ft)	17,644	15	25	5,029	1,383			1
	Residential - Duplex	Count	7	15	100	5,409	5,752			24
	Residential - Manuf. Housing	Count	17	15	100	955	991			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	15	100	2,802	2,979			24
	Residential - Single Family Dwelling	Count	2,387	15	100	659,724	701,507			24
	Schools HAZUS SDURS	Count	3	17	100	3,540	3,582			18
	substation ca	Count	1	17	25	1,000	275			0
	transln ca	Length (ft)	7,713	15	-	1,899	0			0
	US cell towers	Count	3	14	-	750	0			1
West Sacramento South 2	Delta Roads PBSJ Major Roads	Length (ft)	3,074	7	25	1,014	279	279	1,547	6
	Petroleum Pipelines	Length (ft)	2,538	7	0	533	0			0
Woodward_Island	Delta Roads PBSJ Minor Roads	Length (ft)	28,139	23	25	5,628	1,548	11,938	126,310	6
	gas pipeline kinder morgan LS 9	Length (ft)	7,820	23	0	1,642	0			0
	mokelumne aqueduct pipe	Length (ft)	23,350	23	-	116,750	9,760			1
	Rail HAZUS SDURS	Length (ft)	8,034	4	25	2,290	630			1
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Length (ft)	9,702	16	25	1,940	534	2,006	16,429	6
	gas oil wells	Count	2	17	0	0	0			0
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	16	100	81	86			24
	Residential - Multi-Dwellings- 20 to 49 un	Count	1	16	100	27	29			24
	Residential - Single Family Dwelling	Count	4	16	100	1,277	1,357			24
	transln ca	Length (ft)	53,222	16	-	13,104	0			0
Yolo_Bypass	Commercial - Personal and Repair Servi	Count	2	12	39	4,476	2,930	40,871	134,732	14
	Commercial - Professional/ Technical Se	Count	1	12	100	9,234	9,142			18
	Commercial - Retail Trade	Count	1	12	42	3,770	2,530			15
	Commercial - Wholesale Trade	Count	4	12	37	20,302	13,064			13
	Delta Roads PBSJ Major Roads	Length (ft)	489	12	25	161	44			6
	Delta Roads PBSJ Minor Roads	Length (ft)	117,305	12	25	23,461	6,452			6
	Gas Oil Production Fields	Area (Acres)	6,636	12	0	0	0			0
	gas oil wells	Count	245	11	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	16	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	16,531	12	25	5,455	1,500			3
	Natural Gas Pipeline	Length (ft)	66,804	12	0	12,693	0			0
	Natural Gas Wells	Count	10	9	-	0	0			0
	Petroleum Pipelines	Length (ft)	58,522	12	0	12,290	0			0
	Rail HAZUS SDURS	Length (ft)	21,229	12	25	6,050	1,664			1
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	12	100	47	49			24
	Residential - Multi-Dwellings- 20 to 49 un	Count	1	12	100	8	8			24
	Residential - Single Family Dwelling	Count	9	12	100	2,246	2,388			24
	transln ca	Length (ft)	124,042	12	-	30,541	0			0
Zone 120	Commercial - Retail Trade	Count	2	9	30	1,788	1,082			11
	Delta Roads PBSJ Major Roads	Length (ft)	30,537	9	25	10,077	2,771			6
	Delta Roads PBSJ Minor Roads	Length (ft)	55,353	9	25	11,071	3,044			6
	Gas Oil Production Fields	Area (Acres)	1,657	9	0	0	0			0
	gas oil wells	Count	37	10	0	0	0			0

	Natural Gas Pipeline	Length (ft)	18,811	9	0	6,114	0			0
	Natural Gas Wells	Count	14	12	-	0	0			0
	Residential - Manuf. Housing	Count	19	9	100	1,041	1,077			24
	Residential - Single Family Dwelling	Count	99	9	44	26,142	13,808			21
	transln_ca	Length (ft)	16,408	9	-	4,040	0	21,782	60,272	0
Zone 122	Residential - Single Family Dwelling	Count	2	12	100	375	399	399	375	24
Zone 14	gas_oil_wells	Count	2	14	0	0	0			0
	Natural Gas Pipeline	Length (ft)	2,273	19	0	432	0	0	432	0
Zone 148	Commercial - Retail Trade	Count	2	15	100	212	233			18
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	354	15	25	117	32			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	22,964	15	25	4,593	1,263			6
	gas_oil_wells	Count	6	18	0	0	0			0
	Hwy_HAZUS_SDURS	Length (ft)	9,687	15	25	3,197	879			3
	Residential - Manuf. Housing	Count	10	15	100	549	569			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	15	100	390	415			24
	Residential - Single Family Dwelling	Count	42	15	100	8,390	8,921			24
	Schools_HAZUS_SDURS	Count	2	13	33	2,360	1,519			12
	transln_ca	Length (ft)	7,365	15	-	1,813	0	13,831	21,620	0
Zone 155	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	543	10	25	109	30			6
	transln_ca	Length (ft)	769	10	-	189	0	30	298	0
Zone 158 (Smith Tract_2)	Boatlaunch	Count	2	1	100	200	220			0
	Commercial - Personal and Repair Servi	Count	3	3	13	8,211	3,387			5
	Commercial - Professional/ Technical Se	Count	2	3	22	10,608	4,901			8
	Commercial - Retail Trade	Count	2	3	16	17,288	7,417			6
	Commercial - Wholesale Trade	Count	2	3	11	15,320	6,151			4
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	6,757	3	25	2,230	613			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	97,442	3	25	19,488	5,359			6
	Hazmat_HAZUS_SDURS	Count	9	3	-	0	0			0
	hc_ambulatory	Count	3	2	12	0	0			4
	hc_nursing_res	Count	2	1	7	0	0			3
	Hwy_Bridge_HAZUS_SDURS	Count	10	2	25	20,000	5,500			3
	Hwy_HAZUS_SDURS	Length (ft)	7,666	3	25	2,530	696			3
	Residential - Duplex	Count	47	3	26	20,169	6,064			12
	Residential - Manuf. Housing	Count	27	3	100	1,337	1,294			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	3	26	150	45			12
	Residential - Multi-Dwellings- 20 to 49 un	Count	2	3	26	5,727	1,722			12
	Residential - Single Family Dwelling	Count	1,372	3	26	285,683	86,419			12
	Residential - Triplex-Quads	Count	57	3	26	25,777	7,750			12
	Schools_HAZUS_SDURS	Count	2	4	9	2,360	948			3
	utilities	Count	1	3	-	0	0	138,486	437,079	0
Zone 160	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	9,676	7	25	1,935	532			6
	Residential - Single Family Dwelling	Count	74	7	37	14,491	6,472	7,004	16,426	18
Zone 162	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	4,772	12	25	954	262			6
	Natural Gas Pipeline	Length (ft)	2,642	12	0	502	0			0
	Residential - Manuf. Housing	Count	2	12	100	126	131			24
	Residential - Single Family Dwelling	Count	12	12	100	3,848	4,092	4,485	5,431	24
Zone 171	Boatlaunch	Count	2	8	100	200	220			0
	Commercial - Retail Trade	Count	2	6	20	180	97			7
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	11,830	6	25	3,904	1,074			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	4,153	6	25	831	228			6
	Gas_Oil_Production_Fields	Area (Acres)	1,319	6	0	0	0			0
	gas_oil_wells	Count	19	5	0	0	0			0
	Hwy_Bridge_HAZUS_SDURS	Count	7	8	25	14,000	3,850			3

	Hwy HAZUS SDURS	Length (ft)	5,715	6	25	1,886	519	7,270	31,738	3
	Natural Gas Pipeline	Length (ft)	20,614	6	0	6,700	0			0
	Rail HAZUS SDURS	Length (ft)	9,173	6	25	2,614	719			1
	Residential - Single Family Dwelling	Count	6	6	33	1,424	563			16
Zone 185	Commercial - Personal and Repair Servi	Count	1	5	16	2,802	1,402	267,454	774,747	6
	Commercial - Professional/ Technical Se	Count	1	5	28	8,486	4,807			10
	Commercial - Retail Trade	Count	1	5	18	1,424	728			6
	Delta Roads PBSJ Minor Roads	Length (ft)	100,663	5	25	20,133	5,536			6
	gas oil wells	Count	1	1	0	0	0			0
	hc nursing res	Count	4	8	18	0	0			9
	Hwy Bridge HAZUS SDURS	Count	3	3	25	6,000	1,650			3
	Hwy HAZUS SDURS	Length (ft)	3,863	5	25	1,275	351			3
	Residential - Duplex	Count	43	5	29	16,425	5,661			14
	Residential - Institutional and Dormitory	Count	5	5	15	34,389	8,448			7
	Residential - Manuf. Housing	Count	10	5	100	474	474			24
	Residential - Multi-Dwellings - 50+ units	Count	1	5	29	24,318	8,382			14
	Residential - Multi-Dwellings- 10 to 19 un	Count	1	5	29	795	274			14
	Residential - Multi-Dwellings- 20 to 49 un	Count	1	5	29	4,662	1,607			14
	Residential - Nursing Home	Count	2	5	15	8,610	2,115			7
	Residential - Single Family Dwelling	Count	2,231	5	29	639,921	224,079			14
	Residential - Triplex-Quads	Count	7	5	29	3,854	1,328			14
	Schools HAZUS SDURS	Count	1	7	13	1,180	610			5
	transln_ca	Length (ft)	13,335	10	-	3,283	0			0
Zone 186								0	3,283	0
Zone 197	Commercial - Professional/ Technical Se	Count	2	15	100	8	9	27,197	44,141	18
	Commercial - Retail Trade	Count	2	15	100	112	123			18
	Delta Roads PBSJ Major Roads	Length (ft)	4,871	15	25	1,607	442			6
	Delta Roads PBSJ Minor Roads	Length (ft)	45,506	15	25	9,101	2,503			6
	gas oil wells	Count	4	15	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	35,965	15	25	11,868	3,264			3
	Natural Gas Pipeline	Length (ft)	5,539	15	0	1,800	0			0
	rail 1000 nodes	Count	2	9	-	0	0			0
	Residential - Manuf. Housing	Count	24	15	100	1,202	1,247			24
	Residential - Multi-Dwellings- 10 to 19 un	Count	2	15	100	804	855			24
	Residential - Single Family Dwelling	Count	84	15	100	17,638	18,755			24
Zone 206	bridges not in HAZUS	Count	3	4	25	3,000	825	27,197	44,141	3
	Commercial - Entertainment and Recrea	Count	2	6	18	4,100	2,187			6
	Commercial - Personal and Repair Servi	Count	2	6	22	4,190	2,328			8
	Commercial - Professional/ Technical Se	Count	1	6	38	3,998	2,573			14
	Commercial - Retail Trade	Count	1	6	23	2,090	1,172			8
	Commercial - Wholesale Trade	Count	2	6	19	8,074	4,352			7
	Delta Roads PBSJ Major Roads	Length (ft)	14,002	6	25	4,621	1,271			6
	Delta Roads PBSJ Minor Roads	Length (ft)	7,511	6	25	1,502	413			6
	Elec Power HAZUS SDURS	Count	1	5	100	129,800	142,780			0
	Gas Oil Production Fields	Area (Acres)	113	6	0	0	0			0
	gas oil wells	Count	9	5	0	0	0			0
	Government - General Services	Count	1	6	17	1,755	1,035			6
	Hazmat HAZUS SDURS	Count	28	2	-	0	0			0
	mokelumne aqueduct pipe	Length (ft)	4,990	6	0	24,950	0			0
	Oil HAZUS SDURS	Count	1	5	20	118	26			0
	Petroleum Pipelines	Length (ft)	56,141	6	0	11,790	0			0
	rail 1000 nodes	Count	3	5	-	0	0			0
	Rail HAZUS SDURS	Length (ft)	23,649	6	25	6,740	1,853			1
	Residential - Institutional and Dormitory	Count	1	6	16	5,637	1,649			8

	transln_ca	Length (ft)	9,175	6	-	2,259	0	162,464	214,623	0
Zone 207	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	5,102	7	25	1,020	281			6
	Petroleum Pipelines	Length (ft)	2,447	7	0	514	0			0
	Rail_HAZUS_SDURS	Length (ft)	20,443	7	25	5,826	1,602	1,883	7,361	1
Zone 214	Gas_Oil_Production_Fields	Area (Acres)	174	13	0	0	0			0
	gas_oil_wells	Count	9	13	0	0	0			0
	Natural Gas Pipeline	Length (ft)	1,419	13	0	270	0			0
	Natural Gas Wells	Count	2	12	-	0	0	0	270	0
Zone 216	gas_oil_wells	Count	1	16	0	0	0			0
	Residential - Single Family Dwelling	Count	3	10	49	1,051	621	621	1,051	23
Zone 31	Residential - Single Family Dwelling	Count	3	6	37	968	432	432	968	18
Zone 33	Residential - Single Family Dwelling	Count	2	7	37	489	218	218	489	18
Zone 36	Commercial - Professional/ Technical Se	Count	2	4	22	76	38			8
	Commercial - Retail Trade	Count	2	4	16	168	79			6
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	459	4	25	151	42			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	4,606	4	25	921	253			6
	Hwy_HAZUS_SDURS	Length (ft)	783	4	25	258	71			3
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	4	26	51	15			12
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	4	26	90	27			12
	Residential - Single Family Dwelling	Count	28	4	26	9,506	2,876			12
	solid_waste_facilities	Count	2	4	25	0	0			0
	transln_ca	Length (ft)	3,946	4	-	972	0	3,401	12,194	0
Zone 37	Commercial - Entertainment and Recrea	Count	3	4	12	10,626	4,734			4
	Commercial - Personal and Repair Servi	Count	5	4	13	10,355	4,670			5
	Commercial - Professional/ Technical Se	Count	3	4	22	30,888	15,459			8
	Commercial - Retail Trade	Count	3	4	16	11,412	5,335			6
	Commercial - Wholesale Trade	Count	3	4	11	13,314	5,858			4
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	4,472	4	25	1,476	406			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	34,426	4	25	6,885	1,893			6
	hc_ambulatory	Count	3	5	16	0	0			6
	Hwy_HAZUS_SDURS	Length (ft)	388	4	25	128	35			3
	Industrial - Heavy	Count	7	4	15	43,744	17,900			5
	Industrial - Light	Count	3	4	17	17,520	7,323			6
	intermodal terminal facilities	Count	3	1	-	0	0			0
	Petroleum Pipelines	Length (ft)	7,203	4	0	1,513	0			0
	rail_1000_nodes	Count	3	1	-	0	0			0
	Rail_Facility_HAZUS_SDRUS	Count	3	1	25	7,717	2,122			0
	Rail_HAZUS_SDURS	Length (ft)	6,429	4	25	1,832	504			1
	Residential - Duplex	Count	23	4	26	9,874	2,969			12
	Residential - Manuf. Housing	Count	349	4	100	17,860	17,485			24
	Residential - Multi-Dwellings - 10 to 19 ur	Count	3	4	26	9,612	2,890			12
	Residential - Multi-Dwellings - 20 to 49 ur	Count	3	4	26	3,877,529	1,165,844			12
	Residential - Multi-Dwellings - 5 to 9 unit	Count	10	4	26	25,275	7,599			12
	Residential - Multi-Dwellings- 10 to 19 ur	Count	3	4	26	6,143	1,847			12
	Residential - Single Family Dwelling	Count	467	4	26	109,336	33,074			12
	Residential - Triplex-Quads	Count	23	4	26	9,588	2,883			12
	Waste_Water_HAZUS_SDURS	Count	3	1	20	235,764	51,868			12
	water_trans	Count	5	1	-	0	0	1,352,699	4,458,390	0
Zone 38	Colleges and Universities	Count	2	5	9	26,390	13,411			3
	Commercial - Entertainment and Recrea	Count	2	5	14	5,468	2,677			5
	Commercial - Personal and Repair Servi	Count	4	5	16	8,544	4,276			6
	Commercial - Professional/ Technical Se	Count	2	5	28	8,416	4,768			10
	Commercial - Retail Trade	Count	2	5	18	8,172	4,180			6

	Commercial - Wholesale Trade	Count	4	5	13	17,645	8,540	60,327	159,062	5
	Delta Roads PBSJ Major Roads	Length (ft)	2,630	5	25	868	239			6
	Delta Roads PBSJ Minor Roads	Length (ft)	18,247	5	25	3,649	1,004			6
	Hazmat HAZUS SDURS	Count	3	1	-	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	1	25	4,000	1,100			3
	Hwy HAZUS SDURS	Length (ft)	1,608	5	25	531	146			3
	Industrial - Food-Drug-Chemicals	Count	2	5	22	18,840	8,414			8
	Industrial - Heavy	Count	2	5	19	7,810	3,385			7
	Natural Gas Pipeline	Length (ft)	875	5	0	166	0			0
	Petroleum Pipelines	Length (ft)	80,209	5	0	16,844	0			0
	Port HAZUS SDURS	Count	2	3	0	5,145	0			0
	rail 1000 nodes	Count	4	1	-	0	0			0
	Rail Facility HAZUS SDRUS	Count	2	1	25	5,145	1,415			0
	Rail HAZUS SDURS	Length (ft)	26,921	5	25	7,672	2,110			1
	Residential - Duplex	Count	7	5	29	1,932	666			14
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	5	29	372	128			14
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	5	29	900	310			14
	Residential - Single Family Dwelling	Count	39	5	29	10,164	3,559			14
	transIn_ca	Length (ft)	1,579	5	-	389	0			0
Zone 64	Commercial - Professional/ Technical Se	Count	2	4	22	1,008	505	6,054	16,059	8
	Commercial - Retail Trade	Count	2	4	16	888	415			6
	Delta Roads PBSJ Minor Roads	Length (ft)	342	4	25	68	19			6
	Gas Oil Production Fields	Area (Acres)	176	4	0	0	0			0
	gas oil wells	Count	1	1	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	3,245	4	25	1,071	294			3
	Industrial - Construction	Count	2	4	37	4,608	2,256			13
	Natural Gas Pipeline	Length (ft)	2,175	4	0	413	0			0
	Residential - Manuf. Housing	Count	3	4	100	214	209			24
	Residential - Single Family Dwelling	Count	29	4	26	7,789	2,356			12
Zone 65	Delta Roads PBSJ Minor Roads	Length (ft)	1,749	5	25	350	96	96	350	6
Zone 69	Delta Roads PBSJ Minor Roads	Length (ft)	4,234	8	25	847	233	233	847	6
	Gas Oil Production Fields	Area (Acres)	18	8	0	0	0			0
	gas oil wells	Count	2	9	0	0	0			0
Zone 74	Commercial - Retail Trade	Count	2	6	23	4	2	12,116	52,055	8
	Delta Roads PBSJ Major Roads	Length (ft)	17,859	6	25	5,893	1,621			6
	Delta Roads PBSJ Minor Roads	Length (ft)	40,610	6	25	8,122	2,234			6
	Gas Oil Production Fields	Area (Acres)	1,144	6	0	0	0			0
	gas oil wells	Count	52	7	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	7,891	6	25	2,604	716			3
	Natural Gas Pipeline	Length (ft)	29,192	6	0	5,546	0			0
	Natural Gas Wells	Count	1	8	-	0	0			0
	Petroleum Pipelines	Length (ft)	8,302	6	0	1,743	0			0
	Rail HAZUS SDURS	Length (ft)	8,167	6	25	2,328	640			1
	Residential - Duplex	Count	2	6	39	546	250			18
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	6	39	642	294			18
	Residential - Multi-Dwellings- 20 to 49 ur	Count	2	6	39	108	49			18
	Residential - Single Family Dwelling	Count	42	6	37	13,039	5,823			18
	Residential - Triplex-Quads	Count	2	6	39	1,065	487			18
	transIn_ca	Length (ft)	42,297	6	-	10,414	0			0
Zone 75	bridges not in HAZUS	Count	3	10	25	3,000	825			3
	Commercial - Retail Trade	Count	2	9	34	1,232	772			12
	Delta Roads PBSJ Major Roads	Length (ft)	425	9	25	140	39			6
	Delta Roads PBSJ Minor Roads	Length (ft)	35,574	9	25	7,115	1,957			6

	gas oil wells	Count	5	9	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	8,838	9	25	2,917	802			3
	Residential - Manuf. Housing	Count	4	9	100	188	194			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	9	48	150	86			23
	Residential - Single Family Dwelling	Count	59	9	47	17,103	9,648			22
	solid waste facilities	Count	2	10	25	0	0	14,323	31,844	0
Zone 77	Commercial - Professional/ Technical Se	Count	2	4	22	528	264			8
	Commercial - Retail Trade	Count	2	4	16	412	193			6
	Delta Roads PBSJ Major Roads	Length (ft)	8,434	4	25	2,783	765			6
	Delta Roads PBSJ Minor Roads	Length (ft)	2,294	4	25	459	126			6
	Rail HAZUS SDURS	Length (ft)	4,346	4	25	1,239	341			1
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	4	26	18	5			12
	Residential - Single Family Dwelling	Count	22	4	26	6,800	2,057			12
	transln_ca	Length (ft)	4,318	4	-	1,063	0	3,751	13,302	0
	bridges not in HAZUS	Count	5	8	25	5,000	1,375			3
Zone 78	Commercial - Professional/ Technical Se	Count	2	7	41	940	626			15
	Commercial - Retail Trade	Count	2	7	26	388	226			9
	Delta Roads PBSJ Major Roads	Length (ft)	10,243	7	25	3,380	930			6
	Delta Roads PBSJ Minor Roads	Length (ft)	22,798	7	25	4,560	1,254			6
	gas oil wells	Count	2	8	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,497	7	25	3,134	862			3
	Natural Gas Pipeline	Length (ft)	51	7	0	17	0			0
	Rail HAZUS SDURS	Length (ft)	6,016	7	25	1,715	472			1
	Residential - Manuf. Housing	Count	2	7	100	123	126			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	7	43	72	37			21
	Residential - Single Family Dwelling	Count	46	7	39	13,296	6,379			19
	transln_ca	Length (ft)	4,101	7	-	1,010	0	12,285	33,633	0
	bridges not in HAZUS	Count	5	8	25	5,000	1,375			3
	Commercial - Professional/ Technical Se	Count	2	7	41	940	626			15
	Commercial - Retail Trade	Count	2	7	26	388	226			9
Zone 79	Delta Roads PBSJ Major Roads	Length (ft)	10,243	7	25	3,380	930			6
	Delta Roads PBSJ Minor Roads	Length (ft)	22,798	7	25	4,560	1,254			6
	gas oil wells	Count	2	8	0	0	0			0
	Hwy HAZUS SDURS	Length (ft)	9,497	7	25	3,134	862			3
	Natural Gas Pipeline	Length (ft)	51	7	0	17	0			0
Zone 80	Rail HAZUS SDURS	Length (ft)	6,016	7	25	1,715	472			1
	Residential - Manuf. Housing	Count	2	7	100	123	126			24
	Residential - Multi-Dwellings- 10 to 19 ur	Count	2	7	43	72	37			21
	Residential - Single Family Dwelling	Count	46	7	39	13,296	6,379			19
	transln_ca	Length (ft)	4,101	7	-	1,010	0	12,285	33,633	0
	bridges not in HAZUS	Count	5	8	25	5,000	1,375			3
	Commercial - Professional/ Technical Se	Count	2	7	41	940	626			15
	Commercial - Retail Trade	Count	2	7	26	388	226			9
	Delta Roads PBSJ Major Roads	Length (ft)	10,243	7	25	3,380	930			6
	Delta Roads PBSJ Minor Roads	Length (ft)	22,798	7	25	4,560	1,254			6
Zone 81	gas oil wells	Count	2	8	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	5	25	4,000	1,100			3
	Natural Gas Pipeline	Length (ft)	7,316	6	0	1,390	0			0
	Residential - Single Family Dwelling	Count	4	6	37	1,068	477	3,375	12,998	18
	transln_ca	Length (ft)	2,625	5	-	646	0	3,582	14,835	0
Zone 82	Delta Roads PBSJ Major Roads	Length (ft)	2,594	5	25	856	235			6
	Delta Roads PBSJ Minor Roads	Length (ft)	35,451	5	25	7,090	1,950			6
	Gas Oil Production Fields	Area (Acres)	739	5	0	0	0			0
	gas oil wells	Count	9	5	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	6	25	4,000	1,100			3
	Natural Gas Pipeline	Length (ft)	6,721	5	0	1,277	0			0
	Natural Gas Wells	Count	1	4	-	0	0			0
	Petroleum Pipelines	Length (ft)	1,030	5	0	216	0			0
	Residential - Single Family Dwelling	Count	3	5	33	749	296			16
	transln_ca	Length (ft)	2,625	5	-	646	0	3,582	14,835	0
Zone 83	Delta Roads PBSJ Minor Roads	Length (ft)	24,222	8	25	4,844	1,332			6
	gas oil wells	Count	9	8	0	0	0			0
	Hwy Bridge HAZUS SDURS	Count	2	3	25	4,000	1,100			3
	Natural Gas Pipeline	Length (ft)	6,491	8	0	1,233	0			0
	Natural Gas Pipeline	Length (ft)	6,491	8	0	1,233	0			0
	Natural Gas Wells	Count	2	11	-	0	0			0
	Residential - Manuf. Housing	Count	2	8	100	87	89			24
Zone 84	Residential - Single Family Dwelling	Count	12	8	39	3,006	1,442	3,964	14,404	19
	Delta Roads PBSJ Major Roads	Length (ft)	3,109	8	25	1,026	282			6
	Delta Roads PBSJ Minor Roads	Length (ft)	703	8	25	141	39			6
Zone 85	Hwy HAZUS SDURS	Length (ft)	3,110	8	25	1,026	282			3
	gas oil wells	Count	5	9	0	0	0			0

Zone 90	Natural Gas Pipeline	Length (ft)	10,955	8	0	2,081	0	603	7,124	0
	Natural Gas Pipeline	Length (ft)	10,955	8	0	2,081	0			0
	transln_ca	Length (ft)	2,387	8	-	769	0			0
	Commercial - Professional/ Technical Se	Count	2	4	28	688	378			10
	Commercial - Retail Trade	Count	2	4	18	3,620	1,792			6
	Delta_Roads_PBSJ_Major_Roads	Length (ft)	9,390	4	25	3,099	852			6
	Delta_Roads_PBSJ_Minor_Roads	Length (ft)	16,336	4	25	3,267	898			6
	Hazmat HAZUS_SDURS	Count	38	4	-	0	0			0
	Hwy_Bridge_HAZUS_SDURS	Count	4	3	25	8,000	2,200			3
	Hwy_HAZUS_SDURS	Length (ft)	4,141	4	25	1,367	376			3
	Industrial - Food-Drug-Chemicals	Count	2	4	22	20,970	9,227			8
	Oil_HAZUS_SDURS	Count	1	3	20	118	26			0
	Petroleum Pipelines	Length (ft)	119,148	4	0	25,021	0			0
	Rail_HAZUS_SDURS	Length (ft)	9,484	4	25	2,703	743			1
	Residential - Single Family Dwelling	Count	44	4	29	12,179	4,265			14
	solid_waste_facilities	Count	4	2	25	0	0			0
	tankfarms	Count	2	1	-	6,000	0			0
	transln_ca	Length (ft)	7,135	4	-	1,757	0	20,757	88,788	0

Table 7- 5b: Estimate Summary of Asset Cost Damage by Island - 100-year Flood- 2050

Island Name	Total Repair Costs (\$1,000)	Total Asset Value (\$1,000)	Percent of Total Value Damaged (%)
Bacon Island	31,587	43,917	72
Bethel Island	418,770	439,732	95
Bishop Tract	66,163	141,119	47
Bixler Tract	855	1,933	44
Boggs Tract	1,073,264	2,926,466	37
Bouldin Island	14,359	25,898	55
Brack Tract	6,118	21,860	28
Bradford Island	11,554	21,630	53
Brannan-Andrus Island	185,145	267,914	69
Browns Island	0	0	0
Byron Tract 1	72,935	227,636	32
Byron Tract 2	11,173	25,651	44
Byron Tract 3	19,821	43,815	45
Cache Haas Tract 1	15,472	65,884	23
Cache Haas Tract 2	1,997	3,426	58
Canal Ranch	32,559	51,348	63
Chippis Island	0	0	0
Clifton Court Forebay Water	1,185	4,278	28
Coney Island	23,296	21,921	106
Deadhorse Island	281	998	28
Decker Island	0	1,536	0
Discovery Bay	674,201	1,147,184	59
Egbert Tract	17,620	58,085	30
Elk Grove 1	1,377,509	2,521,857	55
Empire Tract	10,855	30,527	36
Fabian Tract	60,099	115,456	52
Fay Island	6	23	28
Glanville Tract	19,696	59,584	33
Gliole District	2,908	8,019	36
Grand Island	199,123	253,979	78
Hastings Tract 1	7	6	110
Hastings Tract 2	5,301	13,585	39
Holland Land	1,525	3,932	39
Holland Tract	6,982	15,788	44
Honker Bay Club	474	2,643	18
Hotchkiss Tract 1	173,339	199,506	87
Hotchkiss Tract 2	496	2,253	22
Jersey Island	3,266	24,615	13
Jones Tract-Upper and Lower	92,171	521,071	18
Kasson District	6,237	8,993	69
King Island	145,102	170,332	85
Libby McNeil Tract 1	15,129	27,884	54
Libby McNeil Tract 2	1,164	1,848	63
Liberte Island	2,518	14,599	17
Lincoln Village Tract	607,484	1,262,743	48
Lisbon District	46,928	125,352	37
Little Holland Tract	0	0	0
Little Egbert Tract	27,988	41,697	67
Lower Roberts Island	1,053	2,933	36
Mandeville Island	1,433	5,213	28
McCormack Williamson Tract	1,075	4,093	26
McDonald Tract	21,141	36,246	58
McMullin Ranch-River Junction Tract	24,450	62,527	39

Medford_Island	4,637	8,559	54
Merritt_Island	33,090	47,169	70
Middle_Roberts_Island	94,952	566,147	17
Netherlands_1	1,652	3,941	42
Netherlands_2	127,286	196,852	65
New_Hope_Tract	93,645	142,314	66
Orwood_Tract	55,377	251,174	22
Palm_Tract	6,973	22,563	31
Paradise_Junction	55,027	170,391	32
Pescadero	131,673	360,710	37
Peter_Pocket	470	2,139	22
Pico_Naglee_Tract	392,123	681,746	58
Pierson_Tract	83,204	119,291	70
Pittsburg	41,445	109,053	38
Prospect_Island	1,050	1,788	59
Quimby_Island	409	1,126	36
RD_17_(Mosssdale)	487,796	1,122,396	43
Rindge_Tract	23,783	73,032	33
Rio_Blanco_Tract	1,212	9,988	12
Roberts_Island	330	300	110
Rough_and_Ready_Island	49,591	103,354	48
Ryer_Island	30,185	61,494	49
Sacramento_Pocket_Area	16,074,486	28,874,041	56
Sargent_Barnhart_Tract_1	24,900	100,740	25
Sargent_Barnhart_Tract_2	991,743	1,973,377	50
Sargent_Barnhart_Tract_3	30,486	48,200	63
Schaffer-Pintail_Tract	2,363	6,808	35
Sherman_Island	31,400	127,951	25
Shima_Tract	643,055	1,110,507	58
Shin_Kee_Tract	1,212	12,325	10
Simmons-Wheeler_Island	426	756	56
SM-123	11,749	39,396	30
SM-124	328,715	719,256	46
SM-132	558	525	106
SM-133	0	0	0
SM-134	0	0	0
SM-198	2,595	5,383	48
SM-199	1,178	2,341	50
SM-202	300	531	56
SM-39	5,303	20,349	26
SM-40	428	1,556	28
SM-41	505	3,852	13
SM-42	275	1,753	16
SM-43	266	504	53
SM-44	2,234	7,267	31
SM-46	133	474	28
SM-47	0	0	0
SM-48	31,290	56,869	55
SM-49	50,892	91,100	56
SM-51	0	0	0
SM-52	2,307	7,403	31
SM-53	33	70	47
SM-54	92,951	180,583	51
SM-55	1,926	6,345	30
SM-56	1,190	4,436	27
SM-57	6,301	21,774	29
SM-58	211	768	28
SM-59	673	2,091	32
SM-60	24,216	47,556	51
SM-84	9,361	19,901	47
SM-85-Grizzly_Island	4,464	20,272	22

Smith_Tract	551,116	1,401,180	39
Stark_Tract	1,876	7,984	23
Staten_Island	12,812	43,993	29
Stewart_Tract	17,981	53,788	33
Sutter_Island	15,774	26,334	60
Terminous_Tract 1	20,244	66,440	30
Terminous_Tract 2	193,264	260,806	74
Terminous_Tract 3	2,988	4,050	74
Twitchell_Island	14,925	22,405	67
Tyler_Island 2	27,458	92,866	30
Union_Island 1	111,624	254,549	44
Union_Island 2	64	723	9
Union_Island 3	1,050	7,973	13
Union_Island 4	378	1,572	24
Upper_Roberts_Island	34,831	126,303	28
Van_Sickle_Island	33,861	100,810	34
Veale_Tract 1	13,476	21,937	61
Veale_Tract 2	41,015	120,408	34
Venice_Island	3,705	13,308	28
Victoria_Island	37,778	57,078	66
Walnut_Grove	74,612	80,533	93
Walthal_Tract	34,346	69,632	49
Water Body	0	0	28
Water Canal	0	224	0
Water Zone 1	382,896	686,306	56
Water Zone 2	662,976	1,698,178	39
Water Zone 3	105,970	273,193	39
Water Zone 4	85,486	207,446	41
Water Zone 5	100,128	141,826	71
Webb_Tract	182	416	44
West Sacramento North	4,307,499	4,964,528	87
West Sacramento South 1	794,935	816,905	97
West Sacramento South 2	279	1,547	18
Woodward_Island	11,938	126,310	9
Wright-Elmwood_Tract	2,006	16,429	12
Yolo_Bypass	40,871	134,732	30
Zone 120	21,782	60,272	36
Zone 122	399	375	106
Zone 14	0	432	0
Zone 148	13,831	21,620	64
Zone 155	30	298	10
Zone 158 (Smith Tract_2)	138,486	437,079	32
Zone 160	7,004	16,426	43
Zone 162	4,485	5,431	83
Zone 171	7,270	31,738	23
Zone 185	267,454	774,747	35
Zone 186	0	3,283	0
Zone 197	27,197	44,141	62
Zone 206	162,464	214,623	76
Zone 207	1,883	7,361	26
Zone 214	0	270	0
Zone 216	621	1,051	59
Zone 31	432	968	45
Zone 33	218	489	45
Zone 36	3,401	12,194	28
Zone 37	1,352,699	4,458,390	30
Zone 38	60,327	159,062	38
Zone 64	6,054	16,059	38
Zone 65	96	350	28
Zone 69	233	847	28
Zone 74	12,116	52,055	23

Zone 75	14,323	31,844	45
Zone 77	3,751	13,302	28
Zone 78	12,285	33,633	37
Zone 79	3,375	12,998	26
Zone 80	3,582	14,835	24
Zone 81	3,964	14,404	28
Zone 82	603	7,124	8
Zone 90	20,757	88,788	23
TOTAL (\$1,000)	35,521,316	67,091,312	53

Table 7 - 6a: Estimate of Asset Cost Damaged by Island- (MHHW) - Scour- 2050

1	2	3	4	5	6	7	8	9	10	11	12	13
Island Name	Asset Type	Structure Type	Inventory Unit	Quantity (Expected 2050)	Percent Damage	Total Asset Value (2050)	MHHW Inundation Repair Costs (\$1,000) (2050)	Differential Repair Costs (\$1,000) (2050)	MHHW Inundation Repair Costs - By Island (\$1,000) (2050)	Differential Costs for Point Assets - By Island (\$1,000) (2050)	1,000ft Increment Costs for Point Assets - By Island (\$1,000) (2050)	Differential Costs for Linear Assets - By Island (\$1,000) (2050)
Bacon_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,753	25.0	6,350	1,588	4,763				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	12,115	0.0	3,695	0	3,695				
	Residential - Institutional Dormitory	Point	Count	3	100.0	11,178	9,948	1,230	11,536	1,230	19	8,458
Bethel_Island	Boatlaunch	Point	Count	6	100.0	337	300	37				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	164,797	25.0	18,945	4,736	14,209				
	gas oil wells	Point	Count	16	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	479	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	10,446	0.0	1,985	0	1,985				
	NG wells	Point	Length (ft)	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	383	100.0		13,092	1,618				
	Residential - Single Family Dwelling	Point	Count	888	100.0	182,220	162,175	20,045				
	utilities	Point	Count	1	0.0	0	-	-				
	water trans	Point	Count	2	0.0	0	-	-	180,303	21,700	476	16,193
Bishop_Tract	Boatlaunch	Point	Count	1	100.0	112	100	12				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	27,037	25.0	5,407	1,352	4,055				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	5	43.6	1,037	403	634				
Bixler_Tract	Transmission Line	Linear	Length (ft)	13,405	0.0	3,300	-	3,300	1,854	647	20	7,356
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	240	25.0	30	7	22				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	80	0.0	0	-	-				
Bouldin_Island	Residential - Single Family Dwelling	Point	Count	4	25.8	903	207	696	215	696	109	22
	Commercial - Professional and Techni	Point	Count	1	22.0	4,028	789	3,239				
	Commercial - Retail Trade	Point	Count	1	100.0	630	561	69				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,506	25.0	497	124	373				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,545	25.0	8,509	2,127	6,382				
	gas oil wells	Point	Count	14	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	84	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	18,409	25.0	6,075	1,519	4,556				
	utilities	Point	Count	1	0.0	0	-	-	5,120	3,309	1,421	11,310
Brack_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,468	25.0	1,266	316	949				
	gas oil wells	Point	Count	8	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,223	0.0	741	0	741				
	Residential - Manuf. Housing	Point	Count	8	100.0	285	254	31				
Bradford_Island	Residential - Single Family Dwelling	Point	Count	4	100.0	449	400	49	970	81	1	1,691
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	39,652	25.0	7,930	1,983	5,948				
	gas oil wells	Point	Count	11	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	642	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,733	0.0	1,082	0	1,082				
	NG wells	Point	Count	5	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	6	100.0	221	197	24				
	Residential - Single Family Dwelling	Point	Count	18	100.0	3,596	3,200	396	5,380	420	8	7,030
Brannan-Andrus Island	air trans	Point	Count	2	0.0	0	-	-				
	Boatlaunch	Point	Count	10	100.0	899	800	99				
	Commercial - Entertainment and Recre	Point	Count	2	100.0	3,065	2,728	337				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	22,070	25.0	7,283	1,821	5,462				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	224,386	25.0	37,516	9,379	28,137				
	gas oil wells	Point	Count	88	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	3,873	0.0	0	-	-				

	hc hospital	Point	Count	2	100.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	3	0.0	4,494	0	4,494				
	hwy HAZUS SDURS	Linear	Length (ft)	34,137	25.0	11,265	2,816	8,449				
	NG Pipelines	Linear	Length (ft)	35,601	0.0	8,366	0	8,366				
	NG wells	Point	Count	48	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	280	100.0	10,928	9,726	1,202				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	100.0	820	730	90				
	Residential - Single Family Dwelling	Point	Count	300	100.0	48,611	43,264	5,347				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-				
	Transmission Line	Linear	Length (ft)	2,649	0.0	652	-	652				
	water trans	Point	Count	3	0.0	0	-	-	71,263	11,570	370	51,066
Browns_Island	Hazmat HAZUS SDURS	Point	Count	2	0.0	0	-	-	0	0	0	0
Byron_Tract 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,195	25.0	1,276	319	957				
	hwy HAZUS SDURS	Linear	Length (ft)	5,459	25.0	1,801	450	1,351				
	Residential - Manuf. Housing	Point	Count	2	100.0	83	74	9				
	Residential - Single Family Dwelling	Point	Count	5	100.0	1,037	923	114				
	Transmission Line	Linear	Length (ft)	10,359	0.0	3,335	-	3,335	1,766	123	10	5,643
Byron_Tract 2	Bridges not in HAZUS	Point	Count	5	0.0	4,494	0	4,494				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,789	25.0	2,506	627	1,880				
	Residential - Manuf. Housing	Point	Count	3	100.0	106	95	12				
	Residential - Single Family Dwelling	Point	Count	17	37.0	3,937	1,297	2,641				
	Transmission Line	Linear	Length (ft)	25,247	0.0	8,129	-	8,129	2,018	7,147	57	10,009
Cache_Haas_Tract 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	58,539	25.0	11,708	2,927	8,781				
	gas oil wells	Point	Count	13	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	670	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	878	0.0	167	0	167				
	NG wells	Point	Count	1	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	10,877	0.0	3,502	-	3,502	2,927	0	0	12,449
Cache_Haas_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,532	25.0	1,706	427	1,280				
	gas oil wells	Point	Count	15	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	475	0.0	0	-	-				
	NG wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	19	17	2				
	Residential - Single Family Dwelling	Point	Count	4	29.3	872	227	645				
	Transmission Line	Linear	Length (ft)	567	0.0	183	-	183	671	647	112	1,462
Canal Ranch	Commercial - Professional and Techni	Point	Count	3	35.0	2,447	762	1,685				
	Commercial - Retail Trade	Point	Count	3	20.0	1,608	286	1,322				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,202	25.0	911	228	683				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	171	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	3	0.0	2,247	0	2,247				
	NG Pipelines	Linear	Length (ft)	1,066	0.0	202	0	202	1,276	5,254	366	886
Chipps_Island	gas oil wells	Point	Count	2	0.0	0	-	-	0	0	0	0
Clifton Court Forebay Water	Boatlaunch	Point	Count	1	100.0	112	100	12				
	Residential - Single Family Dwelling	Point	Count	2	16.4	378	55	323				
	Transmission Line	Linear	Length (ft)	9,729	0.0	3,132	-	3,132	155	335	21	3,132
Coney_Island	Residential - Manuf. Housing	Point	Count	9	100.0	343	305	38				
	Residential - Single Family Dwelling	Point	Count	60	100.0	14,448	12,859	1,589	13,164	1,627	396	0
Deadhorse Island	gas oil wells	Point	Count	3	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	199	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,862	0.0	734	0	734				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	7	6	1				
	Residential - Single Family Dwelling	Point	Count	1	100.0	191	170	21	176	22	1	734
Decker_Island	NG Pipelines	Linear	Length (ft)	8,045	0.0	1,528	0	1,528	0	0	0	1,528
Egbert_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	21,889	25.0	2,049	512	1,536				
	gas oil wells	Point	Count	24	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	689	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,937	0.0	945	0	945				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	7	37.0	1,479	487	992				
	Transmission Line	Linear	Length (ft)	2,861	0.0	921	-	921	999	992	20	3,402
Empire_Tract	Boatlaunch	Point	Count	4	100.0	112	100	12				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	114,462	25.0	7,399	1,850	5,549				
	gas oil wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	10	100.0	476	423	52				
	Residential - Single Family Dwelling	Point	Count	7	100.0	787	700	87	3,073	151	7	5,549
Fablan_Tract	Boatlaunch	Point	Count	4	100.0	112	100	12				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	117,050	25.0	6,848	1,712	5,136				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,818	0.0	345	0	345				
	Residential - Manuf. Housing	Point	Count	18	100.0	752	670	83				
	Residential - Single Family Dwelling	Point	Count	28	32.6	4,676	1,358	3,318				
	Transmission Line	Linear	Length (ft)	9,643	0.0	2,374	-	2,374	3,839	3,413	103	7,855
Fay Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	113	25.0	22	6	17	6	0	0	17
Glanville_Tract	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,036	25.0	672	168	504				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,554	25.0	491	123	368				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	85	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	29	26	3				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	28.5	13	3	10				
	Residential - Single Family Dwelling	Point	Count	2	29.3	443	115	327	435	341	76	872
	Boatlaunch	Point	Count	1	100.0	112	100	12				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,301	25.0	1,089	272	817				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	127,834	25.0	25,567	6,392	19,175				
Grand Island	gas oil wells	Point	Count	34	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	761	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	4,494	0	4,494				
	hwy HAZUS SDURS	Linear	Length (ft)	65,548	25.0	21,631	5,408	16,223				
	Industrial - Light	Point	Count	2	100.0	4,989	4,440	549				
	NG Pipelines	Linear	Length (ft)	11,501	0.0	2,185	0	2,185				
	NG wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	22	100.0	863	768	95				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	1,654	1,472	182				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	100.0	439	391	48				
	Residential - Single Family Dwelling	Point	Count	217	100.0	43,307	38,543	4,764				
	Transmission Line	Linear	Length (ft)	13,186	0.0	3,247	-	3,247				
	US Cell Towers	Point	Count	1	0.0	281	-	281	57,786	10,426	718	41,647
	Commercial - Retail Trade	Point	Count	1	100.0	3	3	0				
	gas oil-production fields	Point	Area (acres)	45	0.0	0	-	-	3	0	0	0
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,300	25.0	2,060	515	1,545				
	gas oil wells	Point	Count	27	0.0	0	-	-				
Hastings_Tract 2	gas oil-production fields	Point	Area (acres)	360	0.0	0	-	-				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	6	32.6	1,147	333	814				
	Transmission Line	Linear	Length (ft)	4,432	0.0	1,427	-	1,427	848	814	20	2,972
Holland_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	41,410	25.0	8,282	2,070	6,211				
	gas oil wells	Point	Count	8	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	Residential - Manuf. Housing	Point	Count	2	100.0	72	64	8				
	Residential - Single Family Dwelling	Point	Count	5	100.0	1,184	1,054	130	3,188	2,385	50	6,211
Honker_Bay_Club	gas oil-production fields	Point	Area (acres)	47	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,395	0.0	835	0	835				
	Petroleum Pipelines	Linear	Length (ft)	4,793	0.0	4,793	0	4,793				
	Residential - Single Family Dwelling	Point	Count	3	32.6	593	172	421	172	421	36	5,628
Hotchkiss_Tract 1	Boatlaunch	Point	Count	2	100.0	112	100	12				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	56,069	25.0	6,807	1,702	5,106				
	gas oil wells	Point	Count	14	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	46	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	2,247	0	2,247				
	NG Pipelines	Linear	Length (ft)	12,158	0.0	2,310	0	2,310				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	114	100.0	4,544	4,045	500				
	Residential - Single Family Dwelling	Point	Count	363	43.6	74,141	28,786	45,355				
	Transmission Line	Linear	Length (ft)	14,068	0.0	4,529	-	4,529	34,632	48,114	938	11,945

Hotchkiss_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,887	25.0	669	167	502	167	0	0	952
	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	616	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,371	0.0	450	0	450				
Jersey_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,773	25.0	6,155	1,539	4,616	2,153	76	1	13,130
	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	536	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,422	0.0	3,388	0	3,388				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	39	35	4				
	Residential - Single Family Dwelling	Point	Count	3	100.0	651	579	72				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-				
	Transmission Line	Linear	Length (ft)	15,919	0.0	5,125	-	5,125				
	Bridges not in HAZUS	Point	Count	2	0.0	1,124	0	1,124				
Jones_Tract-Upper_and_Lower	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	84,103	25.0	16,400	4,100	12,300	18,499	1,211	24	37,595
	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	106	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,018	0.0	1,054	0	11,054				
	mokelumne aqueduct pipe	Linear	Length (ft)	14,985	0.0	74,924	5,694	0				
	NG Pipelines	Linear	Length (ft)	15,033	0.0	24,202	0	24,202				
	NG wells	Point	Count	1	0.0	0	-	-				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	39	0	39				
	Rail HAZUS SDURS	Linear	Length (ft)	5,679	100.0	1,618	8,000	0				
	Residential - Manuf. Housing	Point	Count	4	100.0	114	101	13				
	Residential - Single Family Dwelling	Point	Count	5	100.0	678	604	75				
	Boatlaunch	Point	Count	4	100.0	112	100	12				
	Commercial - Entertainment and Recre	Point	Count	4	100.0	2,081	1,852	229				
King_Island	Commercial - Retail Trade	Point	Count	4	100.0	15,924	14,172	1,752	31,150	8,135	161	5,077
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	123,482	25.0	6,769	1,692	5,077				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	152	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	8	0.0	4,494	0	4,494				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	154	100.0	5,784	5,148	636				
	Residential - Single Family Dwelling	Point	Count	63	100.0	9,198	8,186	1,012				
	water trans	Point	Count	4	0.0	0	-	-				
	Communication HAZUS SDURS	Point	Count	2	0.0	265	0	265				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,110	25.0	1,686	422	1,265				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,141	25.0	2,036	509	1,527				
Libby_McNeil_Tract 1	gas oil wells	Point	Count	7	0.0	0	-	-	4,409	8,485	232	2,791
	gas oil-production fields	Point	Area (acres)	143	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	3	100.0	137	122	15				
	Residential - Single Family Dwelling	Point	Count	57	32.6	11,563	3,357	8,205				
	Boatlaunch	Point	Count	2	100.0	112	100	12				
Libby_McNeil_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	480	25.0	69	17	52	383	907	19	52
	gas oil-production fields	Point	Area (acres)	42	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	6	25.8	1,161	266	895				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,521	25.0	2,304	576	1,728				
Liberte Island	gas oil wells	Point	Count	17	0.0	0	-	-	576	2,247	165	5,773
	gas oil-production fields	Point	Area (acres)	470	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	NG Pipelines	Linear	Length (ft)	21,290	0.0	4,045	0	4,045				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	11	10	1				
Lincoln_Village_Tract	Residential - Multi Dwellings - 50+ units	Point	Count	1	100.0	9	8	1	43	147	6	0
	Residential - Single Family Dwelling	Point	Count	1	16.4	170	25	145				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,648	25.0	455	114	341				
Lisbon_District	Rail HAZUS SDURS	Linear	Length (ft)	2,361	25.0	673	168	504	371	254	7	846
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	28.5	11	3	8				
	Residential - Single Family Dwelling	Point	Count	2	29.3	333	87	246				
Little Holland Tract	gas oil wells	Point	Count	2	0.0	0	-	-	0	0	0	0
	gas oil-production fields	Point	Area (acres)	89	0.0	0	-	-				
Little_Egbert□_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,092	25.0	1,693	423	1,270				

	gas oil wells	Point	Count	18	0.0	0	-	-	1,749	164	3	2,640
	gas oil-production fields	Point	Area (acres)	412	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,710	0.0	1,370	0	1,370				
	Residential - Single Family Dwelling	Point	Count	7	100.0	1,489	1,325	164				
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,403	25.0	931	233	698	407	318	7	698
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	3	44.0	67	26	41				
	Residential - Single Family Dwelling	Point	Count	3	39.1	425	148	277				
Mandeville_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	26,063	25.0	5,212	1,303	3,909	1,303	0	0	3,909
	gas oil wells	Point	Count	4	0.0	0	-	-				
McCormack_Willamson_Tract	Communication HAZUS SDURS	Point	Count	2	0.0	265	0	265	496	265	51	2,382
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,930	25.0	1,986	496	1,489				
	gas oil wells	Point	Count	16	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	802	0.0	0	-	-				
McDonald_Tract	NG Pipelines	Linear	Length (ft)	4,699	0.0	893	0	893	7,395	588	9	9,512
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,771	25.0	10,554	2,639	7,916				
	gas oil wells	Point	Count	48	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	602	0.0	0	-	-				
Medford_Island	NG Pipelines	Linear	Length (ft)	5,236	0.0	1,597	0	1,597	3,172	217	3	4,247
	Residential - Institutional Dormitory	Point	Count	1	100.0	5,344	4,756	588				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,314	25.0	5,663	1,416	4,247				
	Residential - Institutional Dormitory	Point	Count	1	100.0	1,973	1,756	217				
Merritt_Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,454	25.0	810	202	607	3,501	4,757	116	5,122
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	34,820	25.0	6,019	1,505	4,514				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	44	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	142	126	16				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	28.5	97	25	72				
	Residential - Single Family Dwelling	Point	Count	32	29.3	6,312	1,643	4,669				
	Boatlaunch	Point	Count	3	100.0	337	300	37				
Middle_Roberts_Island	Commercial - Personal and Repair Serv	Point	Count	1	39.0	691	240	451	13,317	7,655	459	154,782
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	11,881	25.0	3,921	980	2,940				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	107,709	25.0	21,542	5,385	16,156				
	gas oil wells	Point	Count	22	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	620	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	8,231	0.0	1,728	0	11,728				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	hwy HAZUS SDURS	Linear	Length (ft)	18,587	25.0	6,133	1,533	4,600				
	mokelumne aqueduct pipe	Linear	Length (ft)	22,309	0.0	111,543	0	111,543				
	NG Pipelines	Linear	Length (ft)	13,010	0.0	2,472	0	2,472				
	NG wells	Point	Count	5	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	3,641	0.0	3,641	0	3,641				
	Rail HAZUS SDURS	Linear	Length (ft)	7,982	25.0	2,275	569	1,706				
	Residential - Manuf. Housing	Point	Count	18	100.0	691	615	76				
	Residential - Single Family Dwelling	Point	Count	51	48.6	8,538	3,695	4,843				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-				
	Transmission Line	Linear	Length (ft)	40,597	0.0	9,995	-	9,995				
Netherlands_2	air trans	Point	Count	1	0.0	0	-	-	8,674	7,651	294	20,088
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,041	25.0	673	168	505				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	116,484	25.0	23,297	5,824	17,472				
	gas oil wells	Point	Count	19	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	24	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	hwy HAZUS SDURS	Linear	Length (ft)	6,756	25.0	2,229	557	1,672				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,051	25.0	584	146	438				
	Residential - Manuf. Housing	Point	Count	1	100.0	90	80	10				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	28.5	81	21	60				
New_Hope_Tract	Residential - Single Family Dwelling	Point	Count	36	29.3	7,211	1,877	5,334				
	Boatlaunch	Point	Count	4	100.0	225	200	25				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,043	25.0	674	169	506				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	21,196	25.0	2,298	574	1,723				

	gas oil wells	Point	Count	20	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	648	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	2,247	0	2,247				
	hwy HAZUS SDURS	Linear	Length (ft)	1,023	25.0	337	84	253				
	NG Pipelines	Linear	Length (ft)	11,534	0.0	2,191	0	2,191				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	52	100.0	2,055	1,829	226				
	Residential - Single Family Dwelling	Point	Count	23	37.0	3,627	1,194	2,432	4,051	4,930	76	4,673
Orwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,925	25.0	2,585	646	1,939				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	14,841	0.0	3,116	0	13,116				
	mokelumne aqueduct pipe	Linear	Length (ft)	40,546	0.0	202,729	15,407	0				
	NG Pipelines	Linear	Length (ft)	6,470	0.0	1,811	0	1,811				
	Residential - Manuf. Housing	Point	Count	1	100.0	25	22	3				
	Residential - Single Family Dwelling	Point	Count	81	100.0	23,245	20,688	2,557				
	Transmission Line	Linear	Length (ft)	8,083	0.0	2,602	-	2,602	36,764	2,560	39	9,469
Palm_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,442	25.0	4,888	1,222	3,666				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	100	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	10,249	0.0	2,870	0	2,870				
	Rail HAZUS SDURS	Linear	Length (ft)	12,628	25.0	3,599	900	2,699				
	Residential - Manuf. Housing	Point	Count	1	100.0	53	47	6				
	Residential - Single Family Dwelling	Point	Count	9	100.0	2,220	1,976	244				
	Transmission Line	Linear	Length (ft)	5,170	0.0	1,665	-	1,665	4,145	250	8	10,900
Peter Pocket	gas oil wells	Point	Count	3	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	407	0.0	0	-	-				
	NG wells	Point	Count	2	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	20.8	235	43	191				
	Transmission Line	Linear	Length (ft)	865	0.0	279	-	279	43	191	1	279
Pico_Naglee_Tract	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,806	25.0	3,236	809	2,427				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,345	25.0	1,554	389	1,166				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	8,919	0.0	1,694	0	1,694				
	Residential - Manuf. Housing	Point	Count	2	100.0	135	120	15				
	Residential - Single Family Dwelling	Point	Count	33	25.8	8,395	1,924	6,471				
	Transmission Line	Linear	Length (ft)	1,083	0.0	267	-	267				
	utilities	Point	Count	1	0.0	0	-	-	3,242	6,486	831	5,554
Pierson_Tract	Communication HAZUS SDURS	Point	Count	4	100.0	530	472	58				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,242	25.0	2,720	680	2,040				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	64,520	25.0	9,719	2,430	7,290				
	Fire Stations HAZUS SDURS	Point	Count	2	10.0	1,591	142	1,449				
	gas oil wells	Point	Count	8	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	109	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	3	0.0	4,494	0	4,494				
	hwy HAZUS SDURS	Linear	Length (ft)	5,832	25.0	1,924	481	1,443				
	Residential - Manuf. Housing	Point	Count	7	100.0	318	283	35				
	Residential - Single Family Dwelling	Point	Count	72	48.6	11,449	4,955	6,494				
	Schools HAZUS SDURS	Point	Count	3	7.0	1,989	124	1,865				
	Transmission Line	Linear	Length (ft)	2,764	0.0	681	-	681	9,566	14,396	126	11,453
Pittsburg	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,044	25.0	110	28	83				
	NG Pipelines	Linear	Length (ft)	3,070	0.0	583	0	583				
	Petroleum Pipelines	Linear	Length (ft)	3,752	0.0	3,751	0	3,751				
	Port HAZUS SDURS	Linear	Length (ft)	1	0.0	2,572	0	2,572				
	rail 1000 nodes	Linear	Length (ft)	2	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	10,235	25.0	2,917	729	2,188				
	Residential - Manuf. Housing	Point	Count	2	100.0	63	56	7				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	28.5	1,027	260	766				
	Residential - Multi Dwellings - 50+ units	Point	Count	2	28.5	533	135	397				
	Residential - Single Family Dwelling	Point	Count	53	29.3	11,931	3,106	8,825				
	substation ca	Point	Count	1	25.0	1,124	250	874				
	Transmission Line	Linear	Length (ft)	24,177	0.0	5,953	-	5,953	4,564	10,870	300	15,130
Prospect_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,398	25.0	1,080	270	810				

	gas oil wells	Point	Count	12	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	301	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	22.5	1	0	1				
	Residential - Single Family Dwelling	Point	Count	2	29.3	502	131	372	401	372	10	810
Quimby_Island	Bridges not in HAZUS	Point	Count	1	0.0	1,124	0	1,124				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	100.0	94	84	10	84	1,134	90	0
Rindge_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	334,872	25.0	17,001	4,250	12,751				
	gas oil wells	Point	Count	9	0.0	0	-	-				
	NG wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	8	100.0	373	332	41				
	Residential - Single Family Dwelling	Point	Count	16	100.0	2,400	2,136	264				
	US Cell Towers	Point	Count	1	0.0	281	-	281	6,718	586	10	12,751
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,927	25.0	585	146	439				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	hwy HAZUS SDURS	Linear	Length (ft)	496	25.0	163	41	123				
	Transmission Line	Linear	Length (ft)	6,826	0.0	1,681	-	1,681	187	2,247	167	2,242
Roberts_Island	Boatlaunch	Point	Count	3	100.0	112	100	12	100	12	91	0
Rough_and_Ready_Island	air trans	Point	Count	1	0.0	0	-	-				
	Commercial - Entertainment and Recre	Point	Count	1	18.0	566	91	476				
	Commercial - Personal and Repair Ser	Point	Count	1	22.0	1,054	206	848				
	Commercial - Wholesale Trade	Point	Count	2	19.0	5,178	876	4,302				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	4,691	25.0	1,548	387	1,161				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	45,756	25.0	9,151	2,288	6,863				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	10	15.0	13,111	1,750	11,361				
	Hazmat HAZUS SDURS	Point	Count	3	0.0	0	-	-				
	Industrial - Heavy	Point	Count	1	26.0	1,408	326	1,082				
	Petroleum Pipelines	Linear	Length (ft)	7,384	0.0	7,384	0	7,384				
	rail 1000 nodes	Linear	Length (ft)	5	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	20,358	25.0	5,802	1,450	4,351				
	Residential - Manuf. Housing	Point	Count	7	100.0	260	231	29				
	Residential - Single Family Dwelling	Point	Count	11	37.0	1,660	546	1,113	8,151	19,210	16,673	19,759
Ryer Island	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	1,851	25.0	611	153	458				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	44,231	25.0	8,846	2,212	6,635				
	gas oil wells	Point	Count	10	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	46	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	hwy HAZUS SDURS	Linear	Length (ft)	44,661	25.0	14,738	3,684	11,053				
	Residential - Manuf. Housing	Point	Count	2	100.0	108	96	12				
	Residential - Single Family Dwelling	Point	Count	23	100.0	4,926	4,384	542	10,529	2,801	37	18,146
	air trans	Point	Count	1	0.0	0	-	-				
Sargent_Barnhart_Tract 2	Commercial - Medical Office Clinic	Point	Count	1	20.0	870	155	715				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	92,847	25.0	18,569	4,642	13,927				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,566	0.0	1,169	0	11,169				
	hc ambulatory	Point	Count	1	11.0	0	-	-				
	mokelumne aqueduct pipe	Linear	Length (ft)	16,472	0.0	82,357	0	82,357				
	Petroleum Pipelines	Linear	Length (ft)	6	0.0	6	0	6				
	Residential - Manuf. Housing	Point	Count	6	100.0	448	399	49				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	48.0	717	306	411				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	48.0	10,311	4,405	5,906				
	Residential - Single Family Dwelling	Point	Count	1,044	100.0	264,536	235,436	29,100				
	Schools HAZUS SDURS	Point	Count	1	15.0	663	89	574				
	substation ca	Point	Count	1	25.0	1,124	250	874				
	Transmission Line	Linear	Length (ft)	7,750	0.0	1,908	-	1,908	245,682	37,629	1,026	99,367
Sargent_Barnhart_Tract 3	Commercial - Entertainment and Recre	Point	Count	7	9.0	6,351	509	5,842				
	Commercial - Personal and Repair Ser	Point	Count	2	9.0	1,108	89	1,019				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,859	25.0	245	61	184				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	15.5	112	16	97				
	Residential - Multi Dwellings - 50+ units	Point	Count	2	15.5	407	56	351				
	Residential - Single Family Dwelling	Point	Count	35	16.4	8,012	1,168	6,845	1,898	14,154	145	184

Schafter-Pintail Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	26,277	25.0	2,459	615	1,844				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	3	43.6	1,042	404	637	1,019	637	72	1,844
Sherman_Island	Boatlaunch	Point	Count	5	100.0	337	300	37				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,522	25.0	502	125	376				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	94,036	25.0	13,827	3,457	10,370				
	gas oil wells	Point	Count	31	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	530	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	19,829	25.0	6,543	1,636	4,907				
	NG Pipelines	Linear	Length (ft)	65,495	0.0	21,613	0	21,613				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	36	100.0	1,380	1,228	152				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	100.0	94	84	10				
	Residential - Single Family Dwelling	Point	Count	29	100.0	4,712	4,194	518				
	Transmission Line	Linear	Length (ft)	21,392	0.0	6,888	-	6,888	11,024	718	39	44,155
	Transmission Line	Linear	Length (ft)	17,639	0.0	4,343	-	4,343	48	0	0	4,487
Shima_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,003	25.0	193	48	145				
	Transmission Line	Linear	Length (ft)	2,074	0.0	511	-	511	74	0	0	733
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,485	25.0	297	74	223				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	2,074	0.0	511	-	511	74	0	0	733
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Point	Count	3	32.6	472	137	335	137	335	21	0
SM-123	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,084	25.0	1,224	306	918				
	hwy Bridge HAZUS SDURS	Point	Count	3	0.0	2,247	0	2,247				
	Petroleum Pipelines	Linear	Length (ft)	7	0.0	6	0	6				
	Residential - Single Family Dwelling	Point	Count	3	20.8	401	74	327				
	Transmission Line	Linear	Length (ft)	313	0.0	77	-	77	380	2,574	117	1,002
SM-124	Delta Roads PBSJ Major Roads	Linear	Length (ft)	725	25.0	239	60	179				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,035	25.0	1,829	457	1,372				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	2	12.0	1,598	171	1,427				
	NG Pipelines	Linear	Length (ft)	1,966	0.0	373	0	373				
	Petroleum Pipelines	Linear	Length (ft)	2,638	0.0	2,637	0	2,637				
	rail 1000 nodes	Linear	Length (ft)	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,058	25.0	586	147	440				
	Residential - Manuf. Housing	Point	Count	3	100.0	86	77	9				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	28.5	535	136	399				
	Residential - Multi Dwellings - 50+ units	Point	Count	2	28.5	735	186	548				
	Residential - Single Family Dwelling	Point	Count	193	29.3	38,280	9,965	28,315				
	Sewage Treatment	Point	Count	3	15.0	294,945	39,375	4,867				
	Transmission Line	Linear	Length (ft)	3,814	0.0	939	-	939	50,573	35,566	983	5,940
	gas oil wells	Point	Count	1	0.0	0	-	-				
SM-132	Residential - Single Family Dwelling	Point	Count	2	43.6	396	154	242	154	242	480	0
SM-133	gas oil wells	Point	Count	9	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	204	0.0	0	-	-	0	0	0	0
SM-134	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1	0.0	0	-	-	0	0	0	0
SM-198	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	857	25.0	132	33	99				
	gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,304	0.0	818	0	818				
	Petroleum Pipelines	Linear	Length (ft)	5,048	0.0	5,048	0	5,048				
	Rail HAZUS SDURS	Linear	Length (ft)	422	25.0	120	30	90				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	45.5	34	14	20				
	Residential - Single Family Dwelling	Point	Count	6	43.6	1,062	412	650	489	670	440	6,055
	Communication HAZUS SDURS	Point	Count	2	100.0	265	236	29				
SM-199	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,450	25.0	533	133	400				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	43.0	22	9	14				
	Residential - Single Family Dwelling	Point	Count	3	39.1	742	258	483	636	526	13	400
SM-202	Residential - Single Family Dwelling	Point	Count	2	32.6	371	108	263	108	263	25	0
SM-39	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,424	25.0	1,455	364	1,091				
	Transmission Line	Linear	Length (ft)	2,256	0.0	555	-	555	364	0	0	1,647
SM-40	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,779	25.0	1,556	389	1,167	389	0	0	1,167
SM-41	Commercial - Professional and Technic	Point	Count	1	35.0	2	1	2				

	Commercial - Retail Trade	Point	Count	1	20.0	37	7	30				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	218	25.0	43	11	33				
	Petroleum Pipelines	Linear	Length (ft)	9,239	0.0	9,239	0	9,239				
	Rail HAZUS SDURS	Linear	Length (ft)	5,521	25.0	1,573	393	1,180	411	32	2	10,451
SM-42	substation ca	Point	Count	1	25.0	1,124	250	874				
	Transmission Line	Linear	Length (ft)	3,060	0.0	753	-	753	250	874	189	753
SM-43	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	80	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	37.0	375	124	252	124	252	30	0
SM-44	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	10,951	25.0	1,691	423	1,268				
	Residential - Single Family Dwelling	Point	Count	4	25.8	998	229	769				
	Transmission Line	Linear	Length (ft)	2,711	0.0	667	-	667	651	769	9,062	1,936
SM-46	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,339	25.0	468	117	351	117	0	0	351
SM-47	Solid Waste Facilities	Point	Count	1	25.0	0	-	-	0	0	0	0
SM-48	Commercial - Entertainment and Recre	Point	Count	1	12.0	808	86	722				
	Commercial - Professional and Techni	Point	Count	1	22.0	942	184	757				
	Commercial - Retail Trade	Point	Count	2	16.0	16,752	2,385	14,366				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	20,676	0.0	20,675	0	20,675				
	Rail HAZUS SDURS	Linear	Length (ft)	9,923	25.0	2,828	707	2,121	3,363	15,845	1,818	22,796
SM-49	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,423	25.0	528	132	396				
	Petroleum Pipelines	Linear	Length (ft)	2,421	0.0	2,421	0	2,421				
	Rail HAZUS SDURS	Linear	Length (ft)	4,396	25.0	1,253	313	940				
	Residential - Single Family Dwelling	Point	Count	3	29.3	816	212	603	658	603	7,110	3,757
	gas oil-production fields	Point	Area (acres)	3	0.0	0	-	-	0	0	0	0
SM-52	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,395	25.0	370	92	277				
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	170	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	32.0	4	1	3				
	Residential - Single Family Dwelling	Point	Count	2	32.6	674	196	478	289	482	113	277
SM-53	Commercial - Retail Trade	Point	Count	1	18.0	16	3	13				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	53	25.0	11	3	8				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	96	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	22.5	1	0	1	5	14	1	8
SM-54	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,228	25.0	344	86	258				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	1,918	25.0	546	137	410	223	0	0	668
SM-55	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,625	25.0	2,876	719	2,157				
	NG Pipelines	Linear	Length (ft)	4,433	0.0	842	0	842				
	Petroleum Pipelines	Linear	Length (ft)	4,261	0.0	4,260	0	4,260				
	Residential - Single Family Dwelling	Point	Count	3	39.1	592	206	386	925	386	1,064	7,259
SM-56	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,016	25.0	1,083	271	812				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,638	0.0	881	0	881				
	Petroleum Pipelines	Linear	Length (ft)	3,101	0.0	3,100	0	3,100				
	Residential - Single Family Dwelling	Point	Count	4	29.3	864	225	639	496	639	180	4,794
SM-57	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,907	25.0	912	228	684				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	2,247	0	2,247				
	NG Pipelines	Linear	Length (ft)	536	0.0	102	0	102				
	Transmission Line	Linear	Length (ft)	5,522	0.0	1,360	-	1,360	228	2,247	950	2,145
SM-58	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,841	25.0	768	192	576	192	0	0	576
SM-59	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	201	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	632	25.0	208	52	156	52	0	0	156
SM-60	Commercial - Entertainment and Recre	Point	Count	2	12.0	1,492	159	1,333				
	Commercial - Professional and Techni	Point	Count	2	22.0	2,108	413	1,695				
	Commercial - Retail Trade	Point	Count	2	16.0	753	107	646				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,043	25.0	161	40	121				
	hwy Bridge HAZUS SDURS	Point	Count	2	0.0	2,247	0	2,247	720	5,921	722	121
SM-84	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,725	25.0	8,142	2,036	6,107				

SM-85-Grizzly_Island	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	10	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	10	39.1	2,202	767	1,435	2,802	1,435	96	6,107
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	54,921	25.0	8,481	2,120	6,361				
	gas oil wells	Point	Count	11	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	188	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	28,158	0.0	5,350	0	5,350				
	Petroleum Pipelines	Linear	Length (ft)	2,326	0.0	2,326	0	2,326				
	Residential - Single Family Dwelling	Point	Count	6	32.6	1,530	444	1,086	2,565	1,086	13,951	14,037
	Residential - Single Family Dwelling	Point	Count	1	16.4	172	25	147	25	147	14	0
Smith_Tract Staten_Island	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	4,422	25.0	1,459	365	1,094				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	45,950	25.0	3,211	803	2,408				
	gas oil wells	Point	Count	20	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1,092	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	14,654	0.0	3,810	0	3,810				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	12	100.0	411	366	45				
	Residential - Single Family Dwelling	Point	Count	6	100.0	647	576	71	2,110	116	75	7,313
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	3,515	25.0	1,160	290	870				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	61,390	25.0	12,278	3,069	9,208				
Sutter_Island	gas oil wells	Point	Count	5	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	5,146	25.0	1,698	424	1,273				
	Residential - Manuf. Housing	Point	Count	2	100.0	39	35	4				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	45.5	336	136	200				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	45.5	89	36	53				
	Residential - Single Family Dwelling	Point	Count	33	43.8	6,757	2,624	4,134	6,615	4,391	793	11,352
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,050	25.0	266	66	199				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	28	0.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	764	25.0	252	63	189				
Terminous_Tract 1	Residential - Manuf. Housing	Point	Count	8	100.0	413	368	45				
	Residential - Single Family Dwelling	Point	Count	4	20.8	647	120	528				
	Schools HAZUS SDURS	Point	Count	4	5.0	2,652	118	2,534	735	3,107	222	388
	Agriculture	Point	Count	5	100.0	5,354	4,765	589				
	Boatlaunch	Point	Count	5	100.0	112	100	12				
	Commercial - Wholesale Trade	Point	Count	5	100.0	9,045	8,050	995				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	2,781	25.0	917	229	688				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	256,731	25.0	11,429	2,857	8,572				
	gas oil wells	Point	Count	9	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	303	0.0	0	-	-				
Terminous_Tract 2	hwy Bridge HAZUS SDURS	Point	Count	5	0.0	2,247	0	2,247				
	hwy HAZUS SDURS	Linear	Length (ft)	4,771	25.0	1,574	394	1,181				
	NG wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	544	100.0	20,843	18,550	2,293				
	Residential - Single Family Dwelling	Point	Count	216	100.0	32,830	29,219	3,611				
	US Cell Towers	Point	Count	1	0.0	281	-	281	64,164	10,029	3,364	10,441
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,060	25.0	50	13	38				
	Residential - Manuf. Housing	Point	Count	30	100.0	1,108	986	122				
	Residential - Single Family Dwelling	Point	Count	13	20.8	1,758	325	1,433	1,323	1,555	31,179	38
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,601	25.0	3,954	988	2,965				
Twitchell_Island	gas oil wells	Point	Count	22	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	1,407	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	6,373	0.0	1,466	0	1,466				
	NG wells	Point	Count	9	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	31	100.0	1,215	1,082	134				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	100.0	72	64	8				
	Residential - Single Family Dwelling	Point	Count	28	100.0	4,206	3,744	463	5,878	604	141	4,431
	airport points	Point	Count	1	0.0	0	-	-				
	Airports HAZUS SDURS	Point	Count	1	25.0	7,226	1,608	5,618				
	Delta Roads PBSJ Major Roads	Linear	Linear (ft)	5,160	25.0	1,703	426	1,277				
Tyler_Island 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	132,666	25.0	26,533	6,633	19,900				
	gas oil wells	Point	Count	45	0.0	0	-	-				

	gas oil-production fields	Point	Area (acres)	2,107	0.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	1	0.0	2,247	0	2,247				
	NG Pipelines	Linear	Length (ft)	14,527	0.0	3,051	0	3,051				
	NG wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	119	106	13				
	Residential - Single Family Dwelling	Point	Count	13	100.0	2,606	2,319	287				
	Runway HAZUS SDURS	Point	Count	1	25.0	41,207	9,169	32,039				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-	20,260	40,204	1,290	24,227
	Dams HAZUS SDURS	Point	Count	1	0.0	0	-	-				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,382	25.0	1,446	361	1,084				
Union_Island 1	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	175,563	25.0	16,496	4,124	12,372				
	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	149	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	14,719	0.0	2,797	0	2,797				
	Residential - Manuf. Housing	Point	Count	9	100.0	331	295	36				
	Residential - Single Family Dwelling	Point	Count	32	43.6	5,561	2,159	3,402				
	Transmission Line	Linear	Length (ft)	29,471	0.0	7,256	-	7,256	6,939	3,438	94	23,509
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	113	25.0	8	2	6				
	gas oil-production fields	Point	Area (acres)	1	0.0	0	-	-	2	0	0	6
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,076	25.0	333	83	250				
Upper_Roberts_Island	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	188	0.0	0	-	-				
	NG wells	Point	Count	3	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	3	25.8	418	96	322				
	Transmission Line	Linear	Length (ft)	4,342	0.0	1,069	-	1,069	179	322	27	1,319
	gas oil wells	Point	Count	6	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	149	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	39.1	439	153	286				
	Sewage Treatment	Point	Count	1	15.0	112,360	15,000	1,854	15,153	2,140	423	0
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,069	25.0	414	103	310				
Veale_Tract 1	gas oil wells	Point	Count	4	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	85	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	4	100.0	148	132	16				
	Residential - Single Family Dwelling	Point	Count	23	46.6	5,249	2,178	3,071				
	Transmission Line	Linear	Length (ft)	12,208	0.0	3,931	-	3,931	2,414	3,087	34	4,241
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,397	25.0	15	4	11				
	NG Pipelines	Linear	Length (ft)	8	0.0	1	0	1				
	Residential - Single Family Dwelling	Point	Count	39	25.6	7,559	1,732	5,827	1,736	5,827	75	12
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	62,979	25.0	12,596	3,149	9,447				
	gas oil wells	Point	Count	3	0.0	0	-	-				
Venice_Island	Residential - Manuf. Housing	Point	Count	2	100.0	34	30	4	3,179	4	1	9,447
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	66,425	25.0	13,285	3,321	9,964				
	hwy HAZUS SDURS	Linear	Length (ft)	5,688	25.0	1,877	469	1,408				
	NG Pipelines	Linear	Length (ft)	9,171	0.0	1,742	0	1,742				
	Residential - Manuf. Housing	Point	Count	1	100.0	28	25	3				
	Residential - Single Family Dwelling	Point	Count	3	100.0	867	772	95				
	Transmission Line	Linear	Length (ft)	9,614	0.0	3,095	-	3,095	4,587	99	1	16,209
	Communication HAZUS SDURS	Point	Count	5	0.0	663	0	663				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,282	25.0	1,083	271	812				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	34,283	25.0	4,769	1,192	3,576				
Walnut_Grove	gas oil wells	Point	Count	5	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	280	0.0	0	-	-				
	hc ambulatory	Point	Count	2	12.0	0	-	-				
	hwy Bridge HAZUS SDURS	Point	Count	3	0.0	4,494	0	4,494				
	Residential - Manuf. Housing	Point	Count	11	100.0	489	435	54				
	Residential - Single Family Dwelling	Point	Count	203	46.6	40,709	16,892	23,816	18,791	29,027	31,341	4,389
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,630	25.0	868	217	651				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,768	25.0	3,088	772	2,316				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	77	0.0	0	-	-				
Water_Zone 1	hwy HAZUS SDURS	Linear	Length (ft)	8,281	25.0	2,732	683	2,049				
	NG Pipelines	Linear	Length (ft)	411	0.0	115	0	115				

	Petroleum Pipelines	Linear	Length (ft)	4	0.0	4	0	4				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	25.5	58	13	45				
	Residential - Multi Dwellings - 50+ units	Point	Count	2	25.5	31	7	24				
	Residential - Single Family Dwelling	Point	Count	3	25.8	1,229	282	947				
	Transmission Line	Linear	Length (ft)	166	0.0	41	-	41	1,974	1,017	11	5,176
Water Zone 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2	25.0	0	0	0				
	gas oil-production fields	Point	Area (acres)	36	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	1	0.0	0	-	0	0	0	0	0
Water Zone 3	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1	25.0	0	0	0				
	gas oil-production fields	Point	Area (acres)	121	0.0	0	-	-				
	Transmission Line	Linear	Length (ft)	1	0.0	0	-	0	0	0	0	0
Water Zone 4	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	59	25.0	11	3	8				
	gas oil-production fields	Point	Area (acres)	4	0.0	0	-	-				
	gas pipeline kinder morgan LS_9	Linear	Length (ft)	1	0.0	0	0	10,000				
	Transmission Line	Linear	Length (ft)	1	0.0	0	-	0	3	0	0	9
Water Zone 5	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1	25.0	0	0	0				
	Transmission Line	Linear	Length (ft)	1	0.0	0	-	0	0	0	0	0
Webb_Tract	gas oil wells	Point	Count	10	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	83	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,292	0.0	245	0	245				
	NG wells	Point	Count	1	0.0	0	-	-	0	0	0	245
Woodward_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,139	25.0	5,628	1,407	4,221				
	gas pipeline kinder morgan LS_9	Linear	Length (ft)	7,820	0.0	1,642	0	11,642				
	mokelumne aqueduct pipe	Linear	Length (ft)	23,350	0.0	116,749	8,873	0	10,280	0	0	5,863
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,702	25.0	1,940	485	1,455				
	gas oil wells	Point	Count	2	0.0	0	-	-				
	Residential - Multi Dwellings - 10 to 19	Point	Count	1	100.0	60	53	7				
	Residential - Multi Dwellings - 50+ units	Point	Count	1	100.0	47	42	5				
	Residential - Single Family Dwelling	Point	Count	4	48.6	931	403	528				
	Transmission Line	Linear	Length (ft)	32,244	0.0	7,939	-	7,939	983	540	125	9,394
Yolo_Bypass	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	983	25.0	196	49	147	49	0	0	147
Zone 14	gas oil wells	Point	Count	1	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,273	0.0	432	0	432	0	0	0	432
Zone 155	Transmission Line	Linear	Length (ft)	769	0.0	189	-	189	0	0	0	189
Zone 162	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,564	25.0	623	156	467				
	NG Pipelines	Linear	Length (ft)	1,545	0.0	293	0	293				
	Residential - Single Family Dwelling	Point	Count	6	29.3	1,282	334	948	489	948	64	760
Zone 186	Transmission Line	Linear	Length (ft)	13,335	0.0	3,283	-	3,283	0	0	0	3,283
Zone 206	Bridges not in HAZUS	Point	Count	1	0.0	1,124	0	1,124				
	Commercial - Entertainment and Recreation	Point	Count	1	14.0	671	84	587				
	Commercial - Personal and Repair Services	Point	Count	1	16.0	685	98	588				
	Commercial - Professional and Technical	Point	Count	1	28.0	654	163	491				
	Commercial - Retail Trade	Point	Count	1	18.0	339	54	285				
	Commercial - Wholesale Trade	Point	Count	1	13.0	1,319	153	1,166				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,862	25.0	614	154	461				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	455	25.0	91	23	68				
	gas oil wells	Point	Count	1	0.0	0	-	-				
	gas oil-production fields	Point	Area (acres)	4	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	31,152	0.0	31,151	0	31,151				
	rail 1000 nodes	Linear	Length (ft)	2	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,053	25.0	585	146	439	874	4,241	92	32,119
Zone 207	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,856	25.0	371	93	278				
	Petroleum Pipelines	Linear	Length (ft)	1,906	0.0	1,905	0	1,905				
	Rail HAZUS SDURS	Linear	Length (ft)	4,130	25.0	1,177	294	883	387	0	0	3,066
Zone 31	Residential - Single Family Dwelling	Point	Count	3	16.4	735	107	628	107	628	257	0
Zone 33	Residential - Single Family Dwelling	Point	Count	2	16.4	373	54	319	54	319	179	0
Zone 36	Residential - Multi Dwellings - 10 to 19	Point	Count	2	15.5	9	1	8				
	Residential - Single Family Dwelling	Point	Count	2	20.8	604	112	493				
	Solid Waste Facilities	Point	Count	1	25.0	0	-	-	113	501	86	0
Zone 37	Commercial - Entertainment and Recreation	Point	Count	3	16.0	2,437	347	2,090				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	501	25.0	44	11	33	1,115	3,234	270	640
	hc ambulatory	Point	Count	3	11.0	0	-	-				
	hwy HAZUS SDURS	Linear	Length (ft)	61	25.0	20	5	15				
	Petroleum Pipelines	Linear	Length (ft)	487	0.0	487	0	487				
	Rail HAZUS SDURS	Linear	Length (ft)	495	25.0	141	35	106				
	Residential - Manuf. Housing	Point	Count	7	100.0	296	264	33				
	Residential - Multi Dwellings - 10 to 19	Point	Count	3	32.0	67	19	48				
	Residential - Multi Dwellings - 50+ units	Point	Count	3	32.0	121	35	87				
	Residential - Single Family Dwelling	Point	Count	10	32.6	1,376	400	977				
Zone 38	Commercial - Professional and Technic	Point	Count	2	35.0	47	15	32	166	76	12	1,738
	Commercial - Retail Trade	Point	Count	2	20.0	34	6	28				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	516	25.0	90	22	67				
	hwy HAZUS SDURS	Linear	Length (ft)	95	25.0	31	8	23				
	Petroleum Pipelines	Linear	Length (ft)	1,314	0.0	1,314	0	1,314				
	Rail HAZUS SDURS	Linear	Length (ft)	1,559	25.0	444	111	333				
	Residential - Multi Dwellings - 10 to 19	Point	Count	2	22.5	2	0	2				
	Residential - Multi Dwellings - 50+ units	Point	Count	2	22.5	18	4	14				
Zone 64	gas oil-production fields	Point	Area (acres)	3	0.0	0	-	-	96	564	492	0
	Residential - Single Family Dwelling	Point	Count	3	16.4	661	96	564				
Zone 90	Hazmat HAZUS SDURS	Point	Count	3	0.0	0	-	-	1	0	0	29
	Petroleum Pipelines	Linear	Length (ft)	27	0.0	26	0	26				
	Rail HAZUS SDURS	Linear	Length (ft)	14	25.0	4	1	3				

Table 7 - 6b: Estimate of Asset Cost Damage by Island (100-year Flood) - Scour- 2050

1	2	3	4	5	6	7	8	9	10	11	12	13
Island Name	Asset Type	Structure Type	Inventory Unit	Quantity (Expected 2050)	Percent Damage	Total Asset Value (\$1,000)	100 Year Inundation Repair Costs (\$1,000)	Differential Repair Costs (\$1,000)	100 Year Inundation Repair Costs - By Island (\$1,000)	Differential Repair Costs for Point Assets - By Island (\$1000)	1,000ft Increment Repair Costs for Point Assets - By Island (\$1,000)	Differential Repair Costs for Linear Assets - By Island (\$1,000)
Bacon_Island	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	31,753	25.0	6,351	1,588	4,763				
	Gas_oil_wells	Point	Count	5	0.0	0	-	-				
	NG_Pipelines	Linear	Length (ft)	12,115	0.0	3,695	0	3,695				
	Residential - Institutional Dormitory	Point	Count	3	100.0	9,953	9,953	0	11,541	0	0	8,458
Bethel_Island	boatlaunch	Point	Count	6	100.0	600	600	0				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	164,797	25.0	32,959	8,240	24,720				
	gas_oil_production_fields	Point	Area	479	0.0	0	-	-				
	Gas_oil_wells	Point	Count	16	0.0	0	-	-				
	NG_Pipelines	Linear	Length (ft)	10,446	0.0	1,985	0	1,985				
	NG_Wells	Point	Count	2	0.0	0	-	-				
	Residential - Duplex	Point	Count	7	100.0	2,315	2,315	0				
	Residential - Manuf. Housing	Point	Count	383	100.0	13,100	13,100	0				
	Residential - Single Family Dwelling	Point	Count	888	100.0	162,173	162,173	0				
	Utilities	Point	Count	2	0.0	0	-	-				
	water_trans	Point	Count	4	0.0	0	-	-	186,429	0	0	26,704
Bishop_Tract	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Retail Trade	Point	Count	1	38.0	18	7	11				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	64,590	25.0	12,918	3,230	9,689				
	gas_oil_production_fields	Point	Area	84	0.0	0	-	-				
	Gas_oil_wells	Point	Count	1	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,207	25.0	1,718	430	1,289				
	Residential - Single Family Dwelling	Point	Count	273	48.6	56,420	27,434	28,986				
	transln_ca	Linear	Length (ft)	16,663	0.0	4,103	-	4,103	33,200	34,997	800	15,080
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	240	25.0	48	12	36				
Bixler_Tract	gas_oil_production_fields	Point	Area	87	0.0	0	-	-				
	Gas_oil_wells	Point	Count	3	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	5	37.0	1,257	465	792	477	792	257	36
	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
Boggs_Tract	Commercial-Professional - Technical S	Point	Count	2	28.0	14,326	4,011	10,315				
	Commercial-Retail Trade	Point	Count	2	18.0	6,798	1,224	5,574				
	Commercial-Wholesale Trade	Point	Count	16	13.0	36,340	4,724	31,615				
	Delta_Roads_PBSJ_Major_Roads	Linear	Length (ft)	9,927	25.0	3,276	819	2,457				
	Delta_Roads_PBSJ_Minor_Roads	Linear	Length (ft)	115,321	25.0	23,064	5,766	17,298				
	Hazmat HAZUS SDURS	Point	Count	21	0.0	0	-	-				
	hc_ambulatory	Point	Count	2	13.0	0	-	-				
	hc_nursing_res	Point	Count	2	10.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	6	25.0	12,000	3,000	9,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,166	25.0	715	179	536				
	Industrial - Heavy	Point	Count	4	19.0	14,872	2,826	12,046				
	Industrial - Light	Point	Count	2	22.0	4,790	1,054	3,736				
	Petroleum Pipelines	Linear	Length (ft)	13,029	0.0	2,736	0	2,736				
	pipeline_trans	Point	Count	2	0.0	0	-	-				
	Port HAZUS SDURS	Point	Count	21	0.0	54,020	0	54,020				
	Rail 1000 nodes	Point	Count	4	0.0	0	-	-				
	Rail Bridge HAZUS SDURS	Point	Count	2	25.0	2,000	500	1,500				
	Rail Facility HAZUS SDURS	Point	Count	6	25.0	15,434	3,859	11,576				
	Rail HAZUS SDURS	Linear	Length (ft)	13,198	25.0	3,761	940	2,821				
	Residential - Duplex	Point	Count	45	28.5	12,822	3,654	9,167				
	Residential - Institutional Dormitory	Point	Count	2	15.0	2,978	447	2,531				

	Residential - Manuf. Housing	Point	Count	40	100.0	1,146	1,146	0				
	Residential - Single Family Dwelling	Point	Count	2,380	29.3	402,783	117,814	284,969				
	Schools HAZUS SDURS	Point	Count	4	5.0	2,360	118	2,242				
	sewage treat	Point	Count	2	30.0	200,000	60,000	-				
	solid waste facilities	Point	Count	2	25.0	0	-	-				
	TankFarms	Point	Count	9	0.0	27,000	-	27,000				
	Waste Water HAZUS SDURS	Point	Count	2	20.0	157,176	31,435	15,718	244,015	482,511	18,304	25,848
Bouldin_Island	Commercial-Professional - Technical S	Point	Count	1	100.0	3,585	3,585	0				
	Commercial-Retail Trade	Point	Count	1	100.0	561	561	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,506	25.0	497	124	373				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,545	25.0	8,509	2,127	6,382				
	Gas oil wells	Point	Count	14	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	18,409	25.0	6,075	1,519	4,556				
	Utilities	Point	Count	1	0.0	0	-	-	7,916	0	0	11,311
Brack_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	17,362	25.0	3,472	868	2,604				
	Gas oil wells	Point	Count	8	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,788	0.0	1,331	0	1,331				
	Residential - Manuf. Housing	Point	Count	8	100.0	294	294	0				
Bradford_Island	Residential - Single Family Dwelling	Point	Count	4	100.0	462	462	0	1,624	0	0	3,936
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	39,652	25.0	7,930	1,993	5,948				
	gas oil production fields	Point	Area	642	0.0	0	-	-				
	Gas oil wells	Point	Count	11	0.0	0	-	-				
Brannan-Andrus Island	NG Pipelines	Linear	Length (ft)	3,733	0.0	1,083	0	1,083				
	NG Wells	Point	Count	5	0.0	0	-	-				
	Residential - Duplex	Point	Count	1	100.0	97	97	0				
	Residential - Manuf. Housing	Point	Count	6	100.0	197	197	0				
	Residential - Single Family Dwelling	Point	Count	18	100.0	3,202	3,202	0	5,479	0	0	7,030
	air trans	Point	Count	2	0.0	0	-	-				
	boatlaunch	Point	Count	10	100.0	1,000	1,000	0				
	Commercial-Entertainment and Recrea	Point	Count	2	100.0	2,728	2,728	0				
	Commercial-Professional - Technical S	Point	Count	2	100.0	5,066	5,066	0				
	Commercial-Retail Trade	Point	Count	2	100.0	4,156	4,156	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	22,070	25.0	7,283	1,821	5,462				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	224,386	25.0	44,877	11,219	33,658				
Browns_Island	gas oil production fields	Point	Area	3,873	0.0	0	-	-				
	Gas oil wells	Point	Count	88	0.0	0	-	-				
	hc hospitals	Point	Count	2	100.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	34,137	25.0	11,265	2,816	8,449				
	NG Pipelines	Linear	Length (ft)	35,601	0.0	8,366	0	8,366				
	NG Wells	Point	Count	48	0.0	0	-	-				
	Residential - Duplex	Point	Count	5	100.0	2,541	2,541	0				
	Residential - Manuf. Housing	Point	Count	280	100.0	9,725	9,725	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	728	728	0				
	Residential - Single Family Dwelling	Point	Count	300	100.0	43,259	43,259	0				
	Residential - Triplex - Quads	Point	Count	3	100.0	2,480	2,480	0				
	solid waste facilities	Point	Count	2	25.0	0	-	-				
	transln ca	Linear	Length (ft)	2,649	0.0	652	-	652				
	water trans	Point	Count	3	0.0	0	-	-	89,039	4,500	24	56,588
	Hazmat HAZUS SDURS	Point	Count	2	0.0	0	-	-	0	0	0	0
Byron_Tract 1	Commercial-Professional - Technical S	Point	Count	2	100.0	2	2	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,494	25.0	1,899	475	1,424				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,850	25.0	2,261	565	1,695				
	Residential - Manuf. Housing	Point	Count	2	100.0	98	98	0				
	Residential - Single Family Dwelling	Point	Count	6	100.0	1,152	1,152	0				
	transln ca	Linear	Length (ft)	10,359	0.0	3,335	-	3,335	3,292	3,000	51	6,455
Byron_Tract 2	boatlaunch	Point	Count	2	100.0	200	200	0				
	bridges not in HAZUS	Point	Count	5	25.0	5,000	1,250	3,750				
	Commercial-Professional - Technical S	Point	Count	2	100.0	1,062	1,062	0				
	Commercial-Retail Trade	Point	Count	2	42.0	230	97	133				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,586	25.0	2,917	729	2,188				

Byron_Tract 3	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	4	100.0	95	95	0				
	Residential - Single Family Dwelling	Point	Count	18	100.0	3,893	3,893	0				
	transln_ca	Linear	Length (ft)	27,721	0.0	8,925	-	8,925	7,326	3,883	184	11,113
Cache_Haas_Tract 1	Commercial-Professional - Technical S	Point	Count	1	38.0	804	306	498				
	Commercial-Retail Trade	Point	Count	1	23.0	253	58	195				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,544	25.0	709	177	532				
	Residential - Single Family Dwelling	Point	Count	107	37.0	27,429	10,149	17,280	10,690	17,974	3,997	532
Cache_Haas_Tract 2	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,005	25.0	662	165	496				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	95,936	25.0	19,187	4,797	14,390				
	gas oil production fields	Point	Area	1,352	0.0	0	-	-				
	Gas oil wells	Point	Count	39	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	16,803	0.0	3,193	0	3,193				
	NG Wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	44	44	0				
	Residential - Single Family Dwelling	Point	Count	9	43.6	1,371	598	773				
	transln_ca	Linear	Length (ft)	15,185	0.0	4,889	-	4,889	6,104	2,273	28	22,968
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,532	25.0	1,706	427	1,280				
	gas oil production fields	Point	Area	475	0.0	0	-	-				
Canal Ranch	Gas oil wells	Point	Count	15	0.0	0	-	-				
	NG Wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	17	17	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	775	775	0				
	transln_ca	Linear	Length (ft)	567	0.0	183	-	183	1,219	0	0	1,462
	Commercial-Professional - Technical S	Point	Count	3	100.0	2,181	2,181	0				
	Commercial-Retail Trade	Point	Count	3	100.0	1,431	1,431	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,202	25.0	1,840	460	1,380				
	gas oil production fields	Point	Area	171	0.0	0	-	-				
	Gas oil wells	Point	Count	5	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	1,411	25.0	466	116	349				
Chippis Island	NG Pipelines	Linear	Length (ft)	1,066	0.0	203	0	203				
	Religion - Churches and Other Non-pr	Point	Count	3	30.0	3,774	1,132	2,642				
	Residential - Manuf. Housing	Point	Count	5	100.0	133	133	0	6,953	7,142	141	1,932
	Gas oil wells	Point	Count	2	0.0	0	-	-	0	0	0	0
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	197	197	0				
	Commercial-Retail Trade	Point	Count	1	100.0	43	43	0				
	Residential - Single Family Dwelling	Point	Count	2	100.0	343	343	0				
	transln_ca	Linear	Length (ft)	9,887	0.0	3,183	-	3,183	683	0	0	3,183
	Residential - Manuf. Housing	Point	Count	9	100.0	305	305	0				
	Residential - Single Family Dwelling	Point	Count	60	100.0	12,858	12,858	0	13,163	0	0	0
	gas oil production fields	Point	Area	199	0.0	0	-	-				
Deadhorse Island	Gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	3,862	0.0	734	0	734				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	6	6	0				
	Residential - Single Family Dwelling	Point	Count	1	100.0	170	170	0	176	0	0	734
	NG Pipelines	Linear	Length (ft)	8,045	0.0	1,529	0	1,529	0	0	0	1,529
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Banks	Point	Count	1	28.0	574	161	413				
	Commercial-Entertainment and Recrea	Point	Count	8	29.0	6,472	1,877	4,595				
	Commercial-Medical - Office Clinic	Point	Count	1	24.0	1,401	336	1,065				
	Commercial-Professional - Technical S	Point	Count	1	100.0	7,919	7,919	0				
	Commercial-Retail Trade	Point	Count	1	38.0	3,800	1,444	2,356				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	96,920	25.0	19,384	4,846	14,538				
Decker Island	hc ambulatory	Point	Count	5	18.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,674	25.0	2,202	551	1,652				
	Residential - Duplex	Point	Count	1	49.5	1,229	608	621				
	Residential - Manuf. Housing	Point	Count	1	100.0	109	109	0				
	Residential - Single Family Dwelling	Point	Count	2,775	48.6	714,249	347,304	366,945				
	water_trans	Point	Count	1	0.0	0	-	-	365,254	375,995	16,720	16,190
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Banks	Point	Count	1	28.0	574	161	413				
	Commercial-Entertainment and Recrea	Point	Count	8	29.0	6,472	1,877	4,595				
	Commercial-Medical - Office Clinic	Point	Count	1	24.0	1,401	336	1,065				
	Commercial-Professional - Technical S	Point	Count	1	100.0	7,919	7,919	0				
	Commercial-Retail Trade	Point	Count	1	38.0	3,800	1,444	2,356				
Discovery Bay	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	96,920	25.0	19,384	4,846	14,538				
	hc ambulatory	Point	Count	5	18.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,674	25.0	2,202	551	1,652				
	Residential - Duplex	Point	Count	1	49.5	1,229	608	621				
	Residential - Manuf. Housing	Point	Count	1	100.0	109	109	0				
	Residential - Single Family Dwelling	Point	Count	2,775	48.6	714,249	347,304	366,945				
	water_trans	Point	Count	1	0.0	0	-	-	365,254	375,995	16,720	16,190
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Banks	Point	Count	1	28.0	574	161	413				
	Commercial-Entertainment and Recrea	Point	Count	8	29.0	6,472	1,877	4,595				
	Commercial-Medical - Office Clinic	Point	Count	1	24.0	1,401	336	1,065				
	Commercial-Professional - Technical S	Point	Count	1	100.0	7,919	7,919	0				

Egbert_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	27,250	25.0	5,450	1,363	4,088	2,960	0	0	6,074					
	gas oil production fields	Point	Area	862	0.0	0	-	-									
	Gas oil wells	Point	Count	28	0.0	0	-	-									
	NG Pipelines	Linear	Length (ft)	4,439	0.0	1,065	0	1,065									
	NG Wells	Point	Count	3	0.0	0	-	-									
	Residential - Manuf. Housing	Point	Count	3	100.0	45	45	0									
	Residential - Single Family Dwelling	Point	Count	9	100.0	1,553	1,553	0									
	transln_ca	Linear	Length (ft)	2,861	0.0	921	-	921									
Elk_Grove 1	bridges not in HAZUS	Point	Count	8	25.0	8,000	2,000	6,000	67,012	88,744	1,069	16,574					
	Commercial-Entertainment and Recrea	Point	Count	4	26.0	3,800	988	2,812									
	Commercial-Medical - Office Clinic	Point	Count	2	22.0	1,432	315	1,117									
	Commercial-Personal and Repair Serv	Point	Count	4	32.0	2,564	820	1,744									
	Commercial-Professional - Technical S	Point	Count	2	47.0	1,804	848	956									
	Commercial-Retail Trade	Point	Count	2	34.0	1,360	462	898									
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	13,724	25.0	4,529	1,132	3,397									
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	45,676	25.0	9,135	2,284	6,851									
	gas oil production fields	Point	Area	42	0.0	0	-	-									
	Gas oil wells	Point	Count	6	0.0	0	-	-									
	Hwy Bridge HAZUS SDURS	Point	Count	6	25.0	12,000	3,000	9,000									
	Hwy HAZUS SDURS	Linear	Length (ft)	4,190	25.0	1,383	346	1,037									
	Industrial - High Technology	Point	Count	2	34.0	12,698	4,317	8,381									
	NG Pipelines	Linear	Length (ft)	6,580	0.0	2,139	0	2,139									
	NG Wells	Point	Count	1	0.0	0	-	-									
	Rail 1000 nodes	Point	Count	2	0.0	0	-	-									
	Rail HAZUS SDURS	Linear	Length (ft)	4,979	25.0	1,419	355	1,064									
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	48.0	440	211	229									
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	48.0	594	285	309									
	Residential - Single Family Dwelling	Point	Count	524	46.6	105,948	49,398	56,550									
	Substation_CA	Point	Count	1	25.0	1,000	250	750									
	transln_ca	Linear	Length (ft)	8,473	0.0	2,086	-	2,086									
	Empire_Tract	boatlaunch	Point	Count	4	100.0	400	400					0	7,246	0	0	17,169
		Delta Roads PBSJ Minor Roads	Linear	Length (ft)	114,462	25.0	22,892	5,723					17,169				
		Gas oil wells	Point	Count	4	0.0	0	-					-				
		Residential - Manuf. Housing	Point	Count	10	100.0	423	423					0				
Residential - Single Family Dwelling		Point	Count	7	100.0	700	700	0									
Fabian_Tract	air trans	Point	Count	4	0.0	0	-	-	25,634	7,988	94	30,358					
	boatlaunch	Point	Count	4	100.0	400	400	0									
	Commercial-Retail Trade	Point	Count	4	100.0	512	512	0									
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,033	25.0	1,331	333	998									
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	177,601	25.0	35,520	8,880	26,640									
	Gas oil wells	Point	Count	5	0.0	0	-	-									
	NG Pipelines	Linear	Length (ft)	1,818	0.0	345	0	345									
	Residential - Duplex	Point	Count	7	100.0	1,953	1,953	0									
	Residential - Institutional Dormitory	Point	Count	4	38.0	12,884	4,896	7,988									
	Residential - Manuf. Housing	Point	Count	24	100.0	912	912	0									
	Residential - Single Family Dwelling	Point	Count	52	100.0	7,748	7,748	0									
	transln_ca	Linear	Length (ft)	9,643	0.0	2,374	-	2,374									
	Fay Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	113	25.0	23	6					17	6	0	0	17
	Glanville_Tract	Commercial-Retail Trade	Point	Count	2	38.0	2	1					1	6,167	8,225	149	8,851
Delta Roads PBSJ Major Roads		Linear	Length (ft)	6,861	25.0	2,264	566	1,698									
Delta Roads PBSJ Minor Roads		Linear	Length (ft)	30,747	25.0	6,149	1,537	4,612									
gas oil production fields		Point	Area	128	0.0	0	-	-									
Gas oil wells		Point	Count	8	0.0	0	-	-									
Hwy Bridge HAZUS SDURS		Point	Count	5	25.0	10,000	2,500	7,500									
Hwy HAZUS SDURS		Linear	Length (ft)	6,208	25.0	2,049	512	1,536									
NG Pipelines		Linear	Length (ft)	383	0.0	124	0	124									
Rail HAZUS SDURS		Linear	Length (ft)	4,115	25.0	1,173	293	880									
Residential - Manuf. Housing		Point	Count	3	100.0	72	72	0									
Residential - Multi-Dwellings - 10 to 19		Point	Count	2	49.5	38	19	19									
Residential - Multi-Dwellings - 50+ unit		Point	Count	2	49.5	18	9	9									
Residential - Single Family Dwelling		Point	Count	7	48.6	1,353	658	695									
Gilole_District		Delta Roads PBSJ Major Roads	Linear	Length (ft)	7,030	25.0	2,320	580	1,740								

Grand Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,047	25.0	209	52	157	2,183	0	0	5,325
	Hwy HAZUS SDURS	Linear	Length (ft)	267	25.0	88	22	66				
	Rail HAZUS SDURS	Linear	Length (ft)	7,101	25.0	2,024	506	1,518				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	14	14	0				
	Residential - Single Family Dwelling	Point	Count	5	100.0	1,009	1,009	0				
	transln_ca	Linear	Length (ft)	7,489	0.0	1,844	-	1,844				
	boatlaunch	Point	Count	1	100.0	100	100	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	935	935	0				
	Commercial-Retail Trade	Point	Count	1	100.0	1,194	1,194	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,301	25.0	1,089	272	817				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	127,834	25.0	25,567	6,392	19,175				
	gas oil production fields	Point	Area	761	0.0	0	-	-				
	Gas oil wells	Point	Count	34	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	65,548	25.0	21,631	5,408	16,223				
	Industrial - Light	Point	Count	2	100.0	4,435	4,435	0				
	NG Pipelines	Linear	Length (ft)	11,501	0.0	2,185	0	2,185				
	NG Wells	Point	Count	1	0.0	0	-	-				
	Residential - Duplex	Point	Count	3	100.0	1,032	1,032	0				
	Residential - Manuf. Housing	Point	Count	22	100.0	768	768	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	1,472	1,472	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	391	391	0				
	Residential - Single Family Dwelling	Point	Count	217	100.0	38,544	38,544	0				
	transln_ca	Linear	Length (ft)	13,186	0.0	3,247	-	3,247				
	US Cell Towers	Point	Count	1	0.0	250	-	250	61,943	3,250	22	41,647
Hastings_Tract 1	Commercial-Retail Trade	Point	Count	1	100.0	3	3	0	3	0	0	0
	gas oil production fields	Point	Area	45	0.0	0	-	-				
Hastings_Tract 2	Commercial-Retail Trade	Point	Count	1	100.0	53	53	0	1,903	0	0	3,378
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,005	25.0	2,601	650	1,951				
	gas oil production fields	Point	Area	363	0.0	0	-	-				
	Gas oil wells	Point	Count	28	0.0	0	-	-				
	NG Wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	25	25	0				
	Residential - Single Family Dwelling	Point	Count	7	100.0	1,175	1,175	0				
	transln_ca	Linear	Length (ft)	4,432	0.0	1,427	-	1,427				
Holland_Land	Delta Roads PBSJ Major Roads	Linear	Length (ft)	119	25.0	39	10	29	1,213	0	0	2,527
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	228	25.0	46	11	34				
	Gas oil wells	Point	Count	2	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	9,793	25.0	3,232	808	2,424				
	Petroleum Pipelines	Linear	Length (ft)	97	0.0	20	0	20				
	Residential - Single Family Dwelling	Point	Count	2	100.0	384	384	0				
	transln_ca	Linear	Length (ft)	78	0.0	19	-	19				
Holland_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	41,410	25.0	8,282	2,071	6,212	3,694	1,500	30	6,212
	Gas oil wells	Point	Count	8	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Residential - Manuf. Housing	Point	Count	2	100.0	64	64	0				
	Residential - Single Family Dwelling	Point	Count	5	100.0	1,059	1,059	0				
Honker_Bay_Club	gas oil production fields	Point	Area	47	0.0	0	-	-	258	273	14	1,842
	NG Pipelines	Linear	Length (ft)	4,395	0.0	835	0	835				
	Petroleum Pipelines	Linear	Length (ft)	4,793	0.0	1,007	0	1,007				
	Residential - Single Family Dwelling	Point	Count	3	48.6	531	258	273				
Hotchkiss_Tract 1	boatlaunch	Point	Count	2	100.0	200	200	0				
	Commercial-Professional - Technical S	Point	Count	2	100.0	2,852	2,852	0				
	Commercial-Retail Trade	Point	Count	2	42.0	330	139	191				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	56,069	25.0	11,214	2,803	8,410				
	gas oil production fields	Point	Area	46	0.0	0	-	-				
	Gas oil wells	Point	Count	15	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	12,516	0.0	2,378	0	2,378				
	NG Wells	Point	Count	3	0.0	0	-	-				
	Residential - Duplex	Point	Count	7	100.0	2,118	2,118	0				
	Residential - Manuf. Housing	Point	Count	114	100.0	4,045	4,045	0				

	Residential - Single Family Dwelling	Point	Count	363	100.0	66,002	66,002	0				
	Residential - Triplex - Quads	Point	Count	4	100.0	904	904	0				
	transln_ca	Linear	Length (ft)	14,068	0.0	4,529	-	4,529	80,062	3,191	110	15,318
Hotchkiss_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,014	25.0	1,803	451	1,352				
	gas oil production fields	Point	Area	634	0.0	0	-	-				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,371	0.0	450	0	450	451	0	0	1,803
Jersey_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,773	25.0	6,155	1,539	4,616				
	gas oil production fields	Point	Area	536	0.0	0	-	-				
	Gas oil wells	Point	Count	12	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	5,422	0.0	3,389	0	3,389				
	NG Wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	35	35	0				
	Residential - Single Family Dwelling	Point	Count	3	100.0	579	579	0				
	solid waste facilities	Point	Count	1	25.0	0	-	-				
	transln_ca	Linear	Length (ft)	15,919	0.0	5,125	-	5,125	2,153	0	0	13,130
Jones_Tract-Upper_and_Lower	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
	Commercial-Professional - Technical S	Point	Count	2	100.0	478	478	0				
	Commercial-Retail Trade	Point	Count	2	100.0	88	88	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	84,103	25.0	16,821	4,205	12,615				
	gas oil production fields	Point	Area	106	0.0	0	-	-				
	Gas oil wells	Point	Count	12	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5,018	0.0	1,054	0	11,054				
	mokelumne aqueduct pipe	Linear	Length (ft)	14,985	0.0	74,925	5,694	0				
	NG Pipelines	Linear	Length (ft)	15,033	0.0	24,203	0	24,203				
	NG Storage	Point	Count	1	0.0	0	-	-				
	NG Wells	Point	Count	1	0.0	0	-	-				
	Rail Bridge HAZUS SDURS	Point	Count	2	100.0	2,000	0	2,000				
	Rail HAZUS SDURS	Linear	Length (ft)	5,679	100.0	1,619	8,000	0				
	Residential - Manuf. Housing	Point	Count	4	100.0	101	101	0				
	Residential - Single Family Dwelling	Point	Count	5	100.0	603	603	0	19,669	3,500	41	37,872
Kasson_District	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,912	25.0	582	146	437				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	18	100.0	2,554	2,554	0				
	transln_ca	Linear	Length (ft)	9,505	0.0	2,340	-	2,340	2,700	0	0	2,777
King_Island	boatlaunch	Point	Count	4	100.0	400	400	0				
	Commercial-Entertainment and Recrea	Point	Count	4	100.0	1,852	1,852	0				
	Commercial-Professional - Technical S	Point	Count	4	100.0	1,952	1,952	0				
	Commercial-Retail Trade	Point	Count	4	100.0	14,176	14,176	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	123,482	25.0	24,696	6,174	18,522				
	gas oil production fields	Point	Area	152	0.0	0	-	-				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	8	25.0	16,000	4,000	12,000				
	NG Wells	Point	Count	2	0.0	0	-	-				
	Residential - Duplex	Point	Count	4	100.0	492	492	0				
	Residential - Institutional Dormitory	Point	Count	4	100.0	9,456	9,456	0				
	Residential - Manuf. Housing	Point	Count	154	100.0	5,152	5,152	0				
	Residential - Single Family Dwelling	Point	Count	63	100.0	8,194	8,194	0				
	water trans	Point	Count	4	0.0	0	-	-	51,847	12,000	293	18,522
Libby_McNeil_Tract 1	Commercial-Professional - Technical S	Point	Count	2	47.0	1,110	522	588				
	Commercial-Retail Trade	Point	Count	2	34.0	1,336	454	882				
	Communication HAZUS SDURS	Point	Count	2	100.0	236	236	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,110	25.0	1,686	422	1,265				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,141	25.0	2,828	707	2,121				
	gas oil production fields	Point	Area	143	0.0	0	-	-				
	Gas oil wells	Point	Count	7	0.0	0	-	-				
	Residential - Duplex	Point	Count	6	48.0	1,746	838	908				
	Residential - Manuf. Housing	Point	Count	3	100.0	122	122	0				
	Residential - Single Family Dwelling	Point	Count	57	46.8	10,293	4,799	5,494	8,099	7,872	1,360	3,386
Libby_McNeil_Tract 2	boatlaunch	Point	Count	2	100.0	200	200	0				
	Commercial-Retail Trade	Point	Count	2	38.0	2	1	1				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	480	25.0	96	24	72				

	gas oil production fields	Point	Area	42	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	6	48.6	1,032	502	530	727	531	84	72
Liberte Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,521	25.0	2,304	576	1,728				
	gas oil production fields	Point	Area	470	0.0	0	-	-				
	Gas oil wells	Point	Count	18	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	21,290	0.0	4,045	0	4,045	1,076	1,500	21	5,773
Lincoln_Village_Tract	Commercial-Entertainment and Recreation	Point	Count	5	20.0	4,338	868	3,470				
	Commercial-Professional - Technical Services	Point	Count	1	41.0	3,142	1,288	1,854				
	Commercial-Retail Trade	Point	Count	1	26.0	4,761	1,238	3,523				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	123,036	25.0	24,607	6,152	18,455				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,211	25.0	1,390	347	1,042				
	Religion - Churches and Other Non-profit	Point	Count	1	14.0	1,948	273	1,675				
	Residential - Duplex	Point	Count	47	43.0	12,104	5,205	6,899				
	Residential - Multi-Dwellings - 10 to 19 units	Point	Count	2	43.0	11,552	4,967	6,585				
	Residential - Multi-Dwellings - 5 to 9 units	Point	Count	20	43.0	32,750	14,083	18,668				
	Residential - Multi-Dwellings - 50+ units	Point	Count	2	43.0	35,918	15,445	20,473				
	Residential - Single Family Dwelling	Point	Count	2,835	39.1	518,455	202,846	315,609				
	Residential - Triplex - Quads	Point	Count	53	43.0	14,315	6,155	8,160				
	Schools HAZUS SDURS	Point	Count	9	9.0	5,310	478	4,832				
	water trans	Point	Count	1	0.0	0	-	-	261,344	397,748	17,060	19,498
	airport points	Point	Count	2	25.0	0	-	-				
	Airports HAZUS SDURS	Point	Count	2	25.0	12,862	3,216	9,647				
Lisbon_District	Delta Roads PBSJ Major Roads	Linear	Length (ft)	20,168	25.0	6,655	1,664	4,992				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	21,178	25.0	4,236	1,059	3,177				
	gas oil production fields	Point	Area	21	0.0	0	-	-				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	4,755	25.0	1,355	339	1,016				
	Residential - Multi-Dwellings - 10 to 19 units	Point	Count	2	100.0	254	254	0				
	Residential - Single Family Dwelling	Point	Count	26	100.0	4,730	4,730	0				
	Runway HAZUS SDURS	Point	Count	2	25.0	73,349	18,337	55,012				
	transln ca	Linear	Length (ft)	4,743	0.0	1,168	-	1,168				
	US Cell Towers	Point	Count	2	0.0	500	-	500	29,598	65,158	1,123	10,352
	gas oil production fields	Point	Area	89	0.0	0	-	-				
	Gas oil wells	Point	Count	2	0.0	0	-	-	0	0	0	0
Little_Egbert□_Tract	Commercial-Professional - Technical Services	Point	Count	3	100.0	3	3	0				
	Commercial-Retail Trade	Point	Count	3	100.0	3	3	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	150	25.0	50	12	37				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	23,412	25.0	4,682	1,171	3,512				
	gas oil production fields	Point	Area	895	0.0	0	-	-				
	Gas oil wells	Point	Count	21	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,495	25.0	1,813	453	1,360				
	NG Pipelines	Linear	Length (ft)	8,586	0.0	2,061	0	2,061				
	NG Wells	Point	Count	2	0.0	0	-	-				
	Residential - Duplex	Point	Count	3	100.0	366	366	0				
	Residential - Manuf. Housing	Point	Count	9	100.0	293	293	0				
	Residential - Single Family Dwelling	Point	Count	71	100.0	12,767	12,767	0	16,568	4,500	87	6,970
Lower_Roberts_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	11,403	25.0	2,281	570	1,710				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	3	100.0	60	60	0				
	Residential - Single Family Dwelling	Point	Count	3	48.6	375	182	193	812	193	44	1,710
Mandeville_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	26,063	25.0	5,213	1,303	3,909				
	Gas oil wells	Point	Count	4	0.0	0	-	-	1,303	0	0	3,909
McCormack_Williamson_Tract	Communication HAZUS SDURS	Point	Count	2	100.0	236	236	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	14,823	25.0	2,965	741	2,223				
	gas oil production fields	Point	Area	805	0.0	0	-	-				
	gas oil production fields	Point	Area	602	0.0	0	-	-				
	Gas oil wells	Point	Count	18	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,699	0.0	893	0	893	977	0	0	3,116
McDonald_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,771	25.0	10,554	2,639	7,916				

McMullin_Ranch-River_Junction	Gas oil wells	Point	Count	48	0.0	0	-	-	7,392	0	0	9,513
	NG Pipelines	Linear	Length (ft)	5,236	0.0	1,597	0	1,597				
	Residential - Institutional Dormitory	Point	Count	1	100.0	4,753	4,753	0				
	Commercial-Retail Trade	Point	Count	2	38.0	60	23	37				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	14,243	25.0	4,700	1,175	3,525				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	29,322	25.0	5,864	1,466	4,398				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	5,373	0.0	1,397	0	1,397				
	Residential - Manuf. Housing	Point	Count	7	100.0	215	215	0				
Medford_Island	Residential - Single Family Dwelling	Point	Count	61	48.6	10,048	4,886	5,162	8,765	8,199	175	13,558
	transln ca	Linear	Length (ft)	17,211	0.0	4,238	-	4,238				
Merritt Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,314	25.0	5,663	1,416	4,247	3,172	0	0	4,247
	Residential - Institutional Dormitory	Point	Count	1	100.0	1,756	1,756	0				
	Commercial-Professional - Technical S	Point	Count	2	100.0	564	564	0				
	Commercial-Retail Trade	Point	Count	2	100.0	124	124	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	20,406	25.0	6,734	1,683	5,050				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	62,904	25.0	12,581	3,145	9,436				
	gas oil production fields	Point	Area	159	0.0	0	-	-				
	Gas oil wells	Point	Count	11	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	4	100.0	180	180	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	180	180	0				
Middle_Roberts_Island	Residential - Single Family Dwelling	Point	Count	66	100.0	11,453	11,453	0	17,329	0	0	14,486
	boatlaunch	Point	Count	3	100.0	300	300	0				
	Commercial-Personal and Repair Serv	Point	Count	1	100.0	613	613	0				
	Commercial-Professional - Technical S	Point	Count	1	100.0	358	358	0				
	Commercial-Retail Trade	Point	Count	1	100.0	84	84	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	12,305	25.0	4,061	1,015	3,045				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	123,063	25.0	24,613	6,153	18,459				
	gas oil production fields	Point	Area	884	0.0	0	-	-				
	Gas oil wells	Point	Count	29	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	8,231	0.0	1,729	0	11,729				
Netherlands 1	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500	33,349	4,905	27	147,094
	Hwy HAZUS SDURS	Linear	Length (ft)	18,587	25.0	6,134	1,533	4,600				
	mokelumne aqueduct pipe	Linear	Length (ft)	22,309	0.0	111,545	8,477	103,068				
	NG Pipelines	Linear	Length (ft)	17,100	0.0	3,249	0	3,249				
	NG Wells	Point	Count	12	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	3,641	0.0	765	0	765				
	Rail HAZUS SDURS	Linear	Length (ft)	7,982	25.0	2,275	569	1,706				
	Residential - Duplex	Point	Count	4	100.0	1,216	1,216	0				
	Residential - Institutional Dormitory	Point	Count	1	47.0	6,424	3,019	3,405				
	Residential - Manuf. Housing	Point	Count	19	100.0	638	638	0				
Netherlands 2	Residential - Single Family Dwelling	Point	Count	58	100.0	8,873	8,873	0	1,194	0	0	2,303
	solid waste facilities	Point	Count	1	25.0	0	-	-				
	transln ca	Linear	Length (ft)	42,538	0.0	10,473	-	10,473				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	430	25.0	86	22	65				
	gas oil production fields	Point	Area	199	0.0	0	-	-				
	Gas oil wells	Point	Count	9	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	9,046	25.0	2,985	746	2,239				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	13	13	0				
	Residential - Single Family Dwelling	Point	Count	2	100.0	413	413	0				
	air trans	Point	Count	1	0.0	0	-	-				
Netherlands 2	Commercial-Professional - Technical S	Point	Count	1	100.0	10	10	0				
	Commercial-Retail Trade	Point	Count	1	100.0	468	468	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	12,898	25.0	4,256	1,064	3,192				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	170,541	25.0	34,108	8,527	25,581				
	Fire Stations HAZUS SDURS	Point	Count	1	100.0	708	708	0				
	gas oil production fields	Point	Area	281	0.0	0	-	-				
	Gas oil wells	Point	Count	27	0.0	0	-	-				
	Hazmat HAZUS SDURS	Point	Count	1	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	8,796	25.0	2,903	726	2,177				

New_Hope_Tract	Rail 1000 nodes	Point	Count	2	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	7,594	25.0	2,164	541	1,623				
	Residential - Manuf. Housing	Point	Count	4	100.0	168	168	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	591	591	0				
	Residential - Single Family Dwelling	Point	Count	153	100.0	27,394	27,394	0				
	Schools HAZUS SDURS	Point	Count	2	13.0	1,180	153	1,027	40,850	2,527	17	32,574
	boatlaunch	Point	Count	4	100.0	400	400	0				
	Commercial-Professional - Technical S	Point	Count	2	100.0	244	244	0				
	Commercial-Retail Trade	Point	Count	2	42.0	798	335	463				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,882	25.0	3,261	815	2,446				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,728	25.0	6,346	1,586	4,759				
	gas oil production fields	Point	Area	792	0.0	0	-	-				
	Gas oil wells	Point	Count	24	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,295	25.0	1,417	354	1,063				
	NG Pipelines	Linear	Length (ft)	13,563	0.0	2,577	0	2,577				
	NG Wells	Point	Count	2	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	5,104	25.0	1,455	364	1,091				
	Residential - Manuf. Housing	Point	Count	61	100.0	2,080	2,080	0				
	Residential - Single Family Dwelling	Point	Count	69	100.0	9,817	9,817	0				
Orwood_Tract	US Cell Towers	Point	Count	4	0.0	1,000	-	1,000	16,995	4,463	71	11,936
	Commercial-Professional - Technical S	Point	Count	1	100.0	384	384	0				
	Commercial-Retail Trade	Point	Count	1	100.0	27	27	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,367	25.0	2,673	668	2,005				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	14,841	0.0	3,117	0	13,117				
	mokelumne aqueduct pipe	Linear	Length (ft)	40,546	0.0	202,730	15,407	0				
	NG Pipelines	Linear	Length (ft)	6,470	0.0	1,812	0	1,812				
	Residential - Manuf. Housing	Point	Count	1	100.0	22	22	0				
	Residential - Single Family Dwelling	Point	Count	87	100.0	22,264	22,264	0				
Palm_Tract	transin ca	Linear	Length (ft)	8,083	0.0	2,602	-	2,602	38,773	0	0	9,536
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	24,442	25.0	4,888	1,222	3,666				
	gas oil production fields	Point	Area	100	0.0	0	-	-				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	10,249	0.0	2,870	0	2,870				
	Rail HAZUS SDURS	Linear	Length (ft)	12,628	25.0	3,599	900	2,699				
	Residential - Manuf. Housing	Point	Count	1	100.0	47	47	0				
	Residential - Single Family Dwelling	Point	Count	9	100.0	1,978	1,978	0				
	transin ca	Linear	Length (ft)	5,170	0.0	1,665	-	1,665	4,147	0	0	10,900
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,574	25.0	849	212	637				
Paradise Junction	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	16,831	25.0	3,366	842	2,525				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	1,557	25.0	514	128	385				
	Rail HAZUS SDURS	Linear	Length (ft)	3,747	25.0	1,068	267	801				
	Residential - Institutional Dormitory	Point	Count	5	26.0	20,266	5,269	14,997				
	Residential - Manuf. Housing	Point	Count	2	100.0	56	56	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	49.5	14	7	7				
	Residential - Single Family Dwelling	Point	Count	11	48.6	1,608	762	826				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
Pescadero	transin ca	Linear	Length (ft)	11,559	0.0	2,846	-	2,846	9,813	22,580	711	7,194
	Commercial-Professional - Technical S	Point	Count	2	100.0	2,146	2,146	0				
	Commercial-Retail Trade	Point	Count	2	38.0	346	131	215				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,697	25.0	890	223	668				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	51,051	25.0	10,210	2,553	7,658				
	gas oil production fields	Point	Area	9	0.0	0	-	-				
	Gas oil wells	Point	Count	5	0.0	0	-	-				
	Hazmat HAZUS SDURS	Point	Count	9	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	14,226	25.0	4,695	1,174	3,521				
	NG Pipelines	Linear	Length (ft)	1,699	0.0	323	0	323				
	Petroleum Pipelines	Linear	Length (ft)	1,067	0.0	224	0	224				

Peter Pocket	Rail HAZUS SDURS	Linear	Length (ft)	257	25.0	73	18	55	72,694	10,551	205	16,553
	Residential - Manuf. Housing	Point	Count	9	100.0	343	343	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	49.5	164	81	83				
	Residential - Single Family Dwelling	Point	Count	45	48.6	8,279	4,026	4,253				
	sewage treat	Point	Count	2	30.0	200,000	60,000	-				
	transln_ca	Linear	Length (ft)	16,671	0.0	4,105	-	4,105				
	gas oil production fields	Point	Area	444	0.0	0	-	-				
	Gas oil wells	Point	Count	5	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,331	0.0	823	0	823				
	NG Wells	Point	Count	2	0.0	0	-	-				
Pico_Naglee_Tract	Residential - Single Family Dwelling	Point	Count	2	48.6	432	210	222	210	222	8	1,101
	transln_ca	Linear	Length (ft)	865	0.0	279	-	279				
	Commercial-Professional - Technical S	Point	Count	2	100.0	3,110	3,110	0				
	Commercial-Retail Trade	Point	Count	2	38.0	744	283	461				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	22,049	25.0	7,276	1,819	5,457				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	51,765	25.0	10,353	2,588	7,765				
	Gas oil wells	Point	Count	7	0.0	0	-	-				
	Hazmat HAZUS SDURS	Point	Count	2	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	16,204	0.0	3,079	0	3,079				
Piercion_Tract	Rail 1000 nodes	Point	Count	2	0.0	0	-	-	21,477	16,829	342	21,088
	Rail HAZUS SDURS	Linear	Length (ft)	2,787	25.0	794	199	596				
	Residential - Manuf. Housing	Point	Count	4	100.0	286	286	0				
	Residential - Single Family Dwelling	Point	Count	117	48.6	24,560	11,942	12,618				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	17,024	0.0	4,192	-	4,192				
	Utilities	Point	Count	2	0.0	0	-	-				
	Commercial-Professional - Technical S	Point	Count	2	100.0	986	986	0				
	Commercial-Retail Trade	Point	Count	2	100.0	398	398	0				
	Communication HAZUS SDURS	Point	Count	4	100.0	472	472	0				
Pittsburg	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,519	25.0	2,811	703	2,108	27,421	5,686	74	19,824
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	90,767	25.0	18,153	4,538	13,615				
	Fire Stations HAZUS SDURS	Point	Count	2	100.0	1,416	1,416	0				
	gas oil production fields	Point	Area	150	0.0	0	-	-				
	Gas oil wells	Point	Count	10	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	11,722	25.0	3,868	967	2,901				
	Residential - Duplex	Point	Count	2	100.0	1,062	1,062	0				
	Residential - Manuf. Housing	Point	Count	11	100.0	408	408	0				
	Residential - Single Family Dwelling	Point	Count	105	100.0	14,386	14,386	0				
Pittsburg	Schools HAZUS SDURS	Point	Count	3	33.0	1,770	584	1,186	27,421	5,686	74	19,824
	transln_ca	Linear	Length (ft)	4,869	0.0	1,199	-	1,199				
	Commercial-Personal and Repair Serv	Point	Count	2	22.0	2,228	490	1,738				
	Commercial-Professional - Technical S	Point	Count	2	38.0	1,044	397	647				
	Commercial-Retail Trade	Point	Count	2	23.0	1,250	288	963				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,213	25.0	2,050	513	1,538				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,797	25.0	1,559	390	1,170				
	Industrial - Construction	Point	Count	2	100.0	3,398	3,398	0				
	NG Pipelines	Linear	Length (ft)	10,041	0.0	1,908	0	1,908				
	Petroleum Pipelines	Linear	Length (ft)	5,423	0.0	1,139	0	1,139				
Pittsburg	Port HAZUS SDURS	Point	Count	2	0.0	5,145	0	5,145	27,421	5,686	74	19,824
	Rail 1000 nodes	Point	Count	8	0.0	0	-	-				
	Rail Bridge HAZUS SDURS	Point	Count	2	25.0	2,000	500	1,500				
	Rail HAZUS SDURS	Linear	Length (ft)	14,711	25.0	4,193	1,048	3,144				
	Residential - Duplex	Point	Count	8	38.5	2,730	1,051	1,679				
	Residential - Manuf. Housing	Point	Count	2	100.0	72	72	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	38.5	2,202	848	1,354				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	38.5	608	234	374				
	Residential - Single Family Dwelling	Point	Count	184	37.0	35,330	13,072	22,258				
	Residential - Triplex - Quads	Point	Count	8	38.5	1,940	747	1,193				
Pittsburg	Substation CA	Point	Count	1	25.0	1,000	250	750	27,421	5,686	74	19,824
	transln_ca	Linear	Length (ft)	37,607	0.0	9,259	-	9,259				

	Utilities	Point	Count	2	0.0	0	-	-	23,297	37,600	1,039	18,158
Prospect_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,398	25.0	1,080	270	810				
	gas oil production fields	Point	Area	301	0.0	0	-	-				
	Gas oil wells	Point	Count	12	0.0	0	-	-				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	1	1	0				
Quimby_Island	Residential - Single Family Dwelling	Point	Count	2	100.0	448	448	0	719	0	0	810
	bridges not in HAZUS	Point	Count	1	25.0	1,000	250	750				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	1	100.0	84	84	0	334	750	57	0
RD 17 (Mosssdale)	boatlaunch	Point	Count	4	100.0	400	400	0				
	bridges not in HAZUS	Point	Count	3	25.0	3,000	750	2,250				
	Commercial-Banks	Point	Count	2	17.0	546	93	453				
	Commercial-Professional - Technical S	Point	Count	2	38.0	2,712	1,031	1,681				
	Commercial-Retail Trade	Point	Count	2	23.0	1,138	262	876				
	Commercial-Wholesale Trade	Point	Count	2	19.0	3,516	668	2,848				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	7,373	25.0	2,433	608	1,825				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	121,719	25.0	24,344	6,086	18,258				
	gas oil production fields	Point	Area	202	0.0	0	-	-				
	Gas oil wells	Point	Count	5	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	7	25.0	14,000	3,500	10,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,937	25.0	1,959	490	1,469				
	Industrial - Heavy	Point	Count	3	26.0	6,725	1,748	4,976				
	Rail HAZUS SDURS	Linear	Length (ft)	2,003	25.0	571	143	428				
	Residential - Duplex	Point	Count	2	38.5	464	179	285				
	Residential - Manuf. Housing	Point	Count	31	100.0	1,208	1,208	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	38.5	244	94	150				
	Residential - Single Family Dwelling	Point	Count	984	37.0	197,982	73,253	124,729				
	Residential - Triplex - Quads	Point	Count	2	38.5	314	121	193				
	transln_ca	Linear	Length (ft)	43,438	0.0	10,695	-	10,695	90,633	148,942	1,827	32,675
Rindge_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	334,872	25.0	66,974	16,744	50,231				
	Gas oil wells	Point	Count	9	0.0	0	-	-				
	NG Wells	Point	Count	4	0.0	0	-	-				
	Residential - Duplex	Point	Count	4	100.0	724	724	0				
	Residential - Manuf. Housing	Point	Count	8	100.0	332	332	0				
	Residential - Single Family Dwelling	Point	Count	16	100.0	2,136	2,136	0				
	US Cell Towers	Point	Count	4	0.0	1,000	-	1,000	19,936	1,000	13	50,231
	transln_ca	Linear	Length (ft)	17,492	0.0	4,307	-	4,307				
Rio_Blanco_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,927	25.0	585	146	439				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,254	25.0	1,404	351	1,053				
Roberts_Island	transln_ca	Linear	Length (ft)	17,492	0.0	4,307	-	4,307	997	1,500	57	5,799
Roberts_Island	boatlaunch	Point	Count	3	100.0	300	300	0	300	0	0	0
Rough_and_Ready_Island	air trans	Point	Count	1	0.0	0	-	-				
	Commercial-Entertainment and Recrea	Point	Count	1	22.0	580	128	452				
	Commercial-Personal and Repair Serv	Point	Count	1	28.0	1,081	303	778				
	Commercial-Professional - Technical S	Point	Count	1	44.0	215	95	120				
	Commercial-Retail Trade	Point	Count	1	30.0	656	197	459				
	Commercial-Wholesale Trade	Point	Count	2	25.0	5,308	1,327	3,981				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,111	25.0	1,687	422	1,265				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	63,076	25.0	12,615	3,154	9,461				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	11	19.0	13,444	2,554	10,890				
	Hazmat HAZUS SDURS	Point	Count	3	0.0	0	-	-				
	Industrial - Heavy	Point	Count	1	35.0	1,443	505	938				
	Petroleum Pipelines	Linear	Length (ft)	8,192	0.0	1,720	0	1,720				
	Rail 1000 nodes	Point	Count	5	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	20,939	25.0	5,968	1,492	4,476				
	Residential - Duplex	Point	Count	2	45.5	576	262	314				
	Residential - Manuf. Housing	Point	Count	8	100.0	266	266	0				
	Residential - Single Family Dwelling	Point	Count	13	43.6	1,701	742	959				
	TankFarms	Point	Count	2	0.0	6,000	-	6,000	11,446	24,892	952	16,922
Ryer Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,851	25.0	611	153	458				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	44,231	25.0	8,846	2,212	6,635				
	gas oil production fields	Point	Area	46	0.0	0	-	-				
	Gas oil wells	Point	Count	10	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	44,661	25.0	14,738	3,685	11,054				
	Residential - Manuf. Housing	Point	Count	2	100.0	96	96	0				
	Residential - Single Family Dwelling	Point	Count	23	100.0	4,386	4,386	0	11,031	1,500	15	18,146
	boatlaunch	Point	Count	3	100.0	300	300	0				
Sacramento_Pocket_Area	bridges not in HAZUS	Point	Count	45	25.0	45,000	11,250	33,750				
	Commercial-Banks	Point	Count	80	24.0	61,080	14,659	46,421				
	Commercial-Entertainment and Recrea	Point	Count	64	26.0	57,759	15,017	42,742				
	Commercial-Medical - Office Clinic	Point	Count	2	22.0	4,839	1,065	3,774				
	Commercial-Personal and Repair Serv	Point	Count	12	32.0	17,461	5,588	11,873				
	Commercial-Professional - Technical S	Point	Count	14	47.0	151,934	71,409	80,525				
	Commercial-Retail Trade	Point	Count	4	34.0	63,311	21,526	41,785				
	Commercial-Wholesale Trade	Point	Count	14	29.0	36,965	10,720	26,245				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	100,193	25.0	33,064	8,266	24,798				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	536,173	25.0	107,235	26,809	80,426				
	freepoint pipe route preferred	Linear	Length (ft)	6,456	0.0	0	-	-				
	Gas oil wells	Point	Count	10	0.0	0	-	-				
	Government - General Services	Point	Count	21	22.0	24,520	5,394	19,126				
	hc ambulatory	Point	Count	18	18.0	0	-	-				
	hc nursing res	Point	Count	5	18.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	5	25.0	10,000	2,500	7,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	60,184	25.0	19,861	4,965	14,896				
	Industrial - Construction	Point	Count	4	100.0	10,382	10,382	0				
	Industrial - Heavy	Point	Count	9	39.0	24,585	9,588	14,997				
	Industrial - Light	Point	Count	2	37.0	6,872	2,543	4,329				
	NG Pipelines	Linear	Length (ft)	18,084	0.0	5,877	0	5,877				
	Petroleum Pipelines	Linear	Length (ft)	16,466	0.0	3,458	0	3,458				
	Rail 1000 nodes	Point	Count	16	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	2,253	25.0	642	161	482				
	Religion - Churches and Other Non-pro	Point	Count	4	15.0	11,202	1,680	9,522				
	Residential - Duplex	Point	Count	159	48.0	46,151	22,152	23,999				
	Residential - Institutional Dormitory	Point	Count	23	23.0	91,050	20,942	70,109				
	Residential - Manuf. Housing	Point	Count	17	100.0	832	832	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	9	48.0	36,356	17,451	18,905				
	Residential - Multi-Dwellings - 20 to 49	Point	Count	3	48.0	55,633	26,704	28,929				
	Residential - Multi-Dwellings - 5 to 9 un	Point	Count	66	48.0	112,983	54,232	58,751				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	15	48.0	175,381	84,183	91,198				
	Residential - Single Family Dwelling	Point	Count	10,468	46.6	1,967,468	917,332	1,050,136				
	Residential - Triplex - Quads	Point	Count	174	48.0	55,698	26,735	28,963				
	Schools HAZUS SDURS	Point	Count	3	28.0	1,770	496	1,274				
	sewage treat	Point	Count	3	30.0	200,000	60,000	-				
	superfund sites	Point	Count	1	0.0	0	-	-				
	TankFarms	Point	Count	3	0.0	9,000	-	9,000				
	transln ca	Linear	Length (ft)	48,817	0.0	12,019	-	12,019				
	US Cell Towers	Point	Count	1	0.0	250	-	250				
	Utilities	Point	Count	2	0.0	0	-	-	1,454,879	1,724,103	13,637	141,955
	Commercial-Professional - Technical S	Point	Count	2	16.0	2	0	2				
	Commercial-Retail Trade	Point	Count	2	14.0	20	3	17				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	16,004	25.0	3,201	800	2,401				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	5	0.0	1	0	10,001				
	Residential - Duplex	Point	Count	20	22.5	5,500	1,238	4,263				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	22.5	800	180	620				
	Residential - Multi-Dwellings - 5 to 9 un	Point	Count	2	22.5	4,592	1,033	3,559				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	22.5	16,448	3,701	12,747				
	Residential - Single Family Dwelling	Point	Count	263	20.8	43,881	9,105	34,776				
	Residential - Triplex - Quads	Point	Count	10	22.5	3,247	731	2,516				
	Schools HAZUS SDURS	Point	Count	2	9.0	1,180	106	1,074	16,897	59,573	8,225	2,402
Sargent_Barnhart_Tract 2	air trans	Point	Count	1	0.0	0	-	-				
	Commercial-Banks	Point	Count	7	24.0	5,454	1,309	4,145				

	Commercial-Entertainment and Recrea	Point	Count	13	26.0	13,521	3,515	10,006	389,483	441,807	10,510	220,065
	Commercial-Medical - Office Clinic	Point	Count	9	22.0	10,007	2,202	7,805				
	Commercial-Personal and Repair Serv	Point	Count	6	32.0	5,372	1,719	3,653				
	Commercial-Professional - Technical S	Point	Count	4	47.0	42,071	19,773	22,298				
	Commercial-Retail Trade	Point	Count	1	34.0	6,767	2,301	4,466				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,901	25.0	1,617	404	1,213				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	189,517	25.0	37,903	9,476	28,428				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	13,189	0.0	2,770	0	12,770				
	hc ambulatory	Point	Count	49	18.0	0	-	-				
	hc hospitals	Point	Count	1	100.0	0	-	-				
	hc nursing res	Point	Count	2	20.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	10	25.0	20,000	5,000	15,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,361	25.0	1,769	442	1,327				
	mokelumne aqueduct pipe	Linear	Length (ft)	39,318	0.0	196,590	14,941	181,649				
	Petroleum Pipelines	Linear	Length (ft)	13,195	0.0	2,771	0	2,771				
	Residential - Duplex	Point	Count	60	48.0	15,748	7,559	8,189				
	Residential - Manuf. Housing	Point	Count	14	100.0	699	699	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	48.0	7,138	3,426	3,712				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	23	48.0	37,812	18,150	19,662				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	48.0	46,490	22,315	24,175				
	Residential - Single Family Dwelling	Point	Count	2,719	46.6	571,250	266,345	304,905				
	Residential - Triplex - Quads	Point	Count	65	48.0	19,157	9,195	9,962				
	Schools HAZUS SDURS	Point	Count	6	13.0	3,540	460	3,080				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln_ca	Linear	Length (ft)	7,750	0.0	1,908	-	1,908				
Sargent_Barnhart_Tract 3	boatlaunch	Point	Count	2	100.0	200	200	0	13,060	11,343	8,184	360
	Commercial-Entertainment and Recrea	Point	Count	8	29.0	6,562	1,903	4,659				
	Commercial-Personal and Repair Serv	Point	Count	2	35.0	1,252	438	814				
	Commercial-Professional - Technical S	Point	Count	2	100.0	4,870	4,870	0				
	Commercial-Retail Trade	Point	Count	2	38.0	300	114	186				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,402	25.0	480	120	360				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	49.5	126	62	64				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	2	49.5	1,106	547	559				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	49.5	460	228	232				
	Residential - Single Family Dwelling	Point	Count	44	48.6	9,052	4,401	4,650				
Schafter-Pintail Tract	Residential - Triplex - Quads	Point	Count	2	49.5	356	176	180				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	26,277	25.0	5,255	1,314	3,942	1,766	478	17	3,942
	Gas oil wells	Point	Count	1	0.0	0	-	-				
Sherman_Island	Residential - Single Family Dwelling	Point	Count	3	48.6	930	452	478				
	boatlaunch	Point	Count	5	100.0	500	500	0	13,373	0	0	38,721
	Commercial-Professional - Technical S	Point	Count	2	100.0	276	276	0				
	Commercial-Retail Trade	Point	Count	2	100.0	628	628	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,522	25.0	502	126	377				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	94,036	25.0	18,807	4,702	14,105				
	gas oil production fields	Point	Area	530	0.0	0	-	-				
	Gas oil wells	Point	Count	31	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	19,829	25.0	6,544	1,636	4,908				
	NG Pipelines	Linear	Length (ft)	65,495	0.0	12,444	0	12,444				
	NG Wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	36	100.0	1,225	1,225	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	84	84	0				
	Residential - Single Family Dwelling	Point	Count	29	100.0	4,197	4,197	0				
	transln_ca	Linear	Length (ft)	21,392	0.0	6,888	-	6,888				
Shima_Tract	Commercial-Entertainment and Recrea	Point	Count	3	29.0	3,482	1,010	2,472				
	Commercial-Medical - Office Clinic	Point	Count	2	24.0	1,324	318	1,006				
	Commercial-Personal and Repair Serv	Point	Count	4	35.0	2,128	745	1,383				
	Commercial-Professional - Technical S	Point	Count	2	100.0	19,088	19,088	0				
	Commercial-Retail Trade	Point	Count	2	38.0	3,656	1,389	2,267				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	110,815	25.0	22,163	5,541	16,622				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	hc ambulatory	Point	Count	9	18.0	0	-	-				
	hc hospitals	Point	Count	2	35.0	0	-	-				

	hc nursing res	Point	Count	3	15.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,769	25.0	1,904	476	1,428				
	Residential - Duplex	Point	Count	48	49.5	13,056	6,463	6,593				
	Residential - Institutional Dormitory	Point	Count	2	26.0	7,296	1,897	5,399				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	4	49.5	8,780	4,346	4,434				
	Residential - Multi-Dwellings - 5 to 9 units	Point	Count	23	49.5	34,496	17,075	17,420				
	Residential - Multi-Dwellings - 50+ units	Point	Count	3	49.5	42,396	20,986	21,410				
	Residential - Single Family Dwelling	Point	Count	2,152	48.6	361,046	175,558	185,487				
	Residential - Triplex - Quads	Point	Count	61	49.5	17,879	8,850	9,029				
	Schools HAZUS SDURS	Point	Count	2	9.0	1,180	106	1,074				
	transln ca	Linear	Length (ft)	19,639	0.0	4,835	-	4,835	264,848	260,975	5,695	22,885
Shin_Kee_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,786	25.0	757	189	568				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,258	25.0	1,405	351	1,054				
	transln ca	Linear	Length (ft)	17,300	0.0	4,259	-	4,259	541	0	0	5,881
Simmons-Wheeler_Island	Residential - Single Family Dwelling	Point	Count	3	46.6	423	197	226	197	226	6	0
SM-123	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,064	25.0	1,341	335	1,006				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	21,125	25.0	4,225	1,056	3,169				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	9	25.0	18,000	4,500	13,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,607	25.0	860	215	645				
	Intermodal terminal facilities	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,480	0.0	818	0	818				
	Petroleum Pipelines	Linear	Length (ft)	3,046	0.0	640	0	640				
	Rail 1000 nodes	Point	Count	3	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	3,085	25.0	879	220	659				
	Residential - Single Family Dwelling	Point	Count	26	39.1	3,304	1,293	2,011				
	Residential - Triplex - Quads	Point	Count	3	43.0	678	292	386				
	transln ca	Linear	Length (ft)	5,315	0.0	1,309	-	1,309	7,911	15,898	372	8,246
SM-124	Commercial-Entertainment and Recreation	Point	Count	6	22.0	8,177	1,799	6,378				
	Commercial-Personal and Repair Services	Point	Count	5	28.0	7,680	2,150	5,530				
	Commercial-Professional - Technical Services	Point	Count	2	44.0	20,154	8,868	11,286				
	Commercial-Retail Trade	Point	Count	2	30.0	13,376	4,013	9,363				
	Commercial-Wholesale Trade	Point	Count	2	25.0	3,434	859	2,576				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,486	25.0	2,800	700	2,100				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	70,817	25.0	14,163	3,541	10,623				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Government - General Services	Point	Count	3	19.0	3,803	722	3,080				
	hc ambulatory	Point	Count	6	16.0	0	-	-				
	hc nursing res	Point	Count	2	18.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,224	25.0	1,394	348	1,045				
	NG Pipelines	Linear	Length (ft)	4,078	0.0	775	0	775				
	Petroleum Pipelines	Linear	Length (ft)	38,776	0.0	8,143	0	8,143				
	Police Stations HAZUS SDURS	Point	Count	2	15.0	3,304	496	2,808				
	Rail 1000 nodes	Point	Count	6	0.0	0	-	-				
	Rail Facility HAZUS SDURS	Point	Count	2	25.0	5,145	1,286	3,859				
	Rail HAZUS SDURS	Linear	Length (ft)	29,823	25.0	8,500	2,125	6,375				
	Residential - Duplex	Point	Count	30	45.5	8,851	4,027	4,824				
	Residential - Manuf. Housing	Point	Count	77	100.0	2,675	2,675	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	45.5	4,392	1,998	2,394				
	Residential - Multi-Dwellings - 5 to 9 units	Point	Count	2	45.5	10,066	4,580	5,486				
	Residential - Multi-Dwellings - 50+ units	Point	Count	2	45.5	11,618	5,286	6,332				
	Residential - Single Family Dwelling	Point	Count	765	43.6	132,169	57,659	74,511				
	Residential - Triplex - Quads	Point	Count	53	45.5	15,399	7,006	8,392				
	Schools HAZUS SDURS	Point	Count	5	11.0	2,950	325	2,626				
	sewage treat	Point	Count	3	30.0	262,500	78,750	-				
	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transln ca	Linear	Length (ft)	13,590	0.0	3,346	-	3,346	190,464	153,193	2,698	32,407
SM-132	Gas oil wells	Point	Count	1	0.0	0	-	-	350	0	0	0
	Residential - Single Family Dwelling	Point	Count	2	100.0	350	350	0				

SM-133	gas oil production fields	Point	Area	204	0.0	0	-	-				
	Gas oil wells	Point	Count	9	0.0	0	-	-	0	0	0	0
SM-134	gas oil production fields	Point	Area	1	0.0	0	-	-				
	Gas oil wells	Point	Count	1	0.0	0	-	-	0	0	0	0
SM-198	Commercial-Retail Trade	Point	Count	2	47.0	2	1	1				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,019	25.0	1,004	251	753				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,380	0.0	832	0	832				
	Petroleum Pipelines	Linear	Length (ft)	5,484	0.0	1,152	0	1,152				
	Rail HAZUS SDURS	Linear	Length (ft)	1,009	25.0	288	72	216				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	38	38	0				
	Residential - Single Family Dwelling	Point	Count	7	100.0	1,133	1,133	0	1,494	1	0	2,952
SM-199	Communication HAZUS SDURS	Point	Count	2	100.0	236	236	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,164	25.0	1,033	258	775				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	49.5	20	10	10				
	Residential - Single Family Dwelling	Point	Count	3	48.6	675	328	347	832	357	221	775
SM-202	Residential - Single Family Dwelling	Point	Count	2	46.6	330	154	176	154	176	10	0
SM-39	Commercial-Professional - Technical S	Point	Count	2	38.0	92	35	57				
	Commercial-Retail Trade	Point	Count	2	23.0	254	58	196				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,675	25.0	1,543	386	1,157				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	17,230	25.0	3,446	862	2,585				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Rail HAZUS SDURS	Linear	Length (ft)	3,727	25.0	1,062	266	797				
	Residential - Single Family Dwelling	Point	Count	8	37.0	1,545	572	974				
	transin ca	Linear	Length (ft)	13,355	0.0	3,288	-	3,288	4,178	7,226	357	7,826
SM-40	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,779	25.0	1,556	389	1,167	389	0	0	1,167
SM-41	Commercial-Professional - Technical S	Point	Count	1	47.0	2	1	1				
	Commercial-Retail Trade	Point	Count	1	34.0	36	12	24				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	373	25.0	75	19	56				
	Petroleum Pipelines	Linear	Length (ft)	10,067	0.0	2,114	0	2,114				
	Rail HAZUS SDURS	Linear	Length (ft)	5,569	25.0	1,587	397	1,190	429	25	13	3,360
SM-42	Substation CA	Point	Count	1	25.0	1,000	250	750				
	transin ca	Linear	Length (ft)	3,060	0.0	753	-	753	250	750	366	753
SM-43	gas oil production fields	Point	Area	80	0.0	0	-	-				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	43.6	336	147	189	147	189	14	0
SM-44	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	15,129	25.0	3,026	756	2,269				
	Residential - Single Family Dwelling	Point	Count	10	39.1	1,949	762	1,186				
	transin ca	Linear	Length (ft)	5,355	0.0	1,318	-	1,318	1,519	1,186	131	3,588
SM-46	Commercial-Retail Trade	Point	Count	1	38.0	3	1	2				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,339	25.0	468	117	351	118	2	0	351
SM-47	solid waste facilities	Point	Count	1	25.0	0	-	-	0	0	0	0
SM-48	Commercial-Entertainment and Recrea	Point	Count	1	26.0	720	187	533				
	Commercial-Professional - Technical S	Point	Count	1	47.0	839	394	445				
	Commercial-Retail Trade	Point	Count	2	34.0	14,924	5,074	9,850				
	Gas oil wells	Point	Count	2	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	20,676	0.0	4,342	0	4,342				
	Rail HAZUS SDURS	Linear	Length (ft)	9,923	25.0	2,828	707	2,121	6,363	10,827	245	6,463
SM-49	Commercial-Entertainment and Recrea	Point	Count	2	26.0	1,768	460	1,308				
	Commercial-Professional - Technical S	Point	Count	2	47.0	7,210	3,389	3,821				
	Commercial-Retail Trade	Point	Count	2	34.0	7,884	2,681	5,203				
	Commercial-Wholesale Trade	Point	Count	3	29.0	5,405	1,567	3,837				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	22,129	25.0	4,426	1,106	3,319				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,040	25.0	1,003	251	752				
	Industrial - Light	Point	Count	2	37.0	4,072	1,507	2,565				
	Petroleum Pipelines	Linear	Length (ft)	19,582	0.0	4,112	0	4,112				
	Rail HAZUS SDURS	Linear	Length (ft)	9,852	25.0	2,808	702	2,106				
	Residential - Single Family Dwelling	Point	Count	11	46.6	2,329	1,086	1,243	12,748	17,979	497	10,290
SM-51	gas oil production fields	Point	Area	3	0.0	0	-	-	0	0	0	0
SM-52	Commercial-Retail Trade	Point	Count	2	26.0	122	32	90				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,912	25.0	1,982	496	1,487				

SM-53	gas oil production fields	Point	Area	188	0.0	0	-	-				
	Gas oil wells	Point	Count	8	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	686	25.0	226	57	170				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	43.0	6	3	3				
SM-54	Residential - Single Family Dwelling	Point	Count	4	39.1	611	239	372	1,825	3,465	177	1,657
	Commercial-Retail Trade	Point	Count	1	18.0	28	5	23				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	53	25.0	11	3	8				
	gas oil production fields	Point	Area	177	0.0	0	-	-				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
SM-55	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	28.5	1	0	1	8	24	6	8
	Commercial-Personal and Repair Serv	Point	Count	3	28.0	4,068	1,139	2,929				
	Commercial-Professional - Technical S	Point	Count	2	44.0	10,930	4,809	6,121				
	Commercial-Retail Trade	Point	Count	2	30.0	10,576	3,173	7,403				
	Commercial-Wholesale Trade	Point	Count	7	25.0	17,206	4,302	12,905				
SM-56	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,187	25.0	1,052	263	789				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,137	25.0	6,227	1,557	4,671				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,346	25.0	774	194	581				
SM-57	Industrial - Construction	Point	Count	2	100.0	8,550	8,550	0				
	Industrial - Heavy	Point	Count	4	35.0	14,320	5,012	9,308				
	NG Pipelines	Linear	Length (ft)	460	0.0	87	0	87				
	Petroleum Pipelines	Linear	Length (ft)	25,987	0.0	5,457	0	5,457				
	Rail 1000 nodes	Point	Count	6	0.0	0	-	-				
SM-58	Rail Facility HAZUS SDURS	Point	Count	2	25.0	5,145	1,286	3,859				
	Rail HAZUS SDURS	Linear	Length (ft)	38,418	25.0	10,949	2,737	8,212				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	45.5	4	2	2				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	45.5	18	8	10				
	Residential - Single Family Dwelling	Point	Count	11	43.6	2,364	1,031	1,332	36,062	49,869	1,030	19,796
SM-59	solid waste facilities	Point	Count	2	25.0	0	-	-				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,625	25.0	3,725	931	2,794				
	NG Pipelines	Linear	Length (ft)	4,433	0.0	842	0	842				
	Petroleum Pipelines	Linear	Length (ft)	4,261	0.0	895	0	895				
	Residential - Single Family Dwelling	Point	Count	3	100.0	530	530	0	1,461	0	0	4,531
SM-60	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,016	25.0	1,403	351	1,052				
	Gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,638	0.0	881	0	881				
	Petroleum Pipelines	Linear	Length (ft)	3,101	0.0	651	0	651				
	Residential - Single Family Dwelling	Point	Count	4	46.6	769	359	411	710	411	6	2,585
SM-61	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	37	25.0	12	3	9				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	12,785	25.0	2,557	639	1,918				
	hc ambulatory	Point	Count	3	14.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
SM-62	Hwy HAZUS SDURS	Linear	Length (ft)	2,242	25.0	740	185	555				
	NG Pipelines	Linear	Length (ft)	5,916	0.0	1,124	0	1,124				
	Residential - Single Family Dwelling	Point	Count	25	37.0	5,583	2,066	3,517				
	solid waste facilities	Point	Count	2	25.0	0	-	-				
	transln ca	Linear	Length (ft)	11,666	0.0	2,872	-	2,872				
SM-63	water trans	Point	Count	2	0.0	0	-	-	4,393	8,017	215	6,478
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	3,841	25.0	768	192	576	192	0	0	576
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	377	25.0	75	19	57				
	gas oil production fields	Point	Area	205	0.0	0	-	-				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
SM-64	Hwy HAZUS SDURS	Linear	Length (ft)	4,382	25.0	1,446	362	1,085				
	Residential - Single Family Dwelling	Point	Count	2	37.0	328	121	205	501	205	7	1,141
	Commercial-Entertainment and Recrea	Point	Count	2	16.0	2,362	378	1,984				
	Commercial-Personal and Repair Serv	Point	Count	2	19.0	800	152	648				
	Commercial-Professional - Technical S	Point	Count	2	35.0	3,336	1,168	2,168				
SM-65	Commercial-Retail Trade	Point	Count	2	20.0	1,190	238	952				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,186	25.0	1,037	259	778				

SM-84	Gas oil wells	Point	Count	3	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Residential - Single Family Dwelling	Point	Count	3	32.6	435	142	293	3,337	9,046	387	778
	Commercial-Retail Trade	Point	Count	2	42.0	156	66	90				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,725	25.0	10,545	2,636	7,909				
SM-85-Grizzly Island	gas oil production fields	Point	Area	10	0.0	0	-	-				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	10	100.0	1,964	1,964	0	4,666	90	1	7,909
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	54,921	25.0	10,984	2,746	8,238				
	gas oil production fields	Point	Area	188	0.0	0	-	-				
Smith_Tract	Gas oil wells	Point	Count	11	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	28,158	0.0	5,350	0	5,350				
	Petroleum Pipelines	Linear	Length (ft)	2,326	0.0	488	0	488				
	Residential - Single Family Dwelling	Point	Count	6	43.6	1,365	595	770	3,342	770	10	14,077
	Commercial-Entertainment and Recrea	Point	Count	4	16.0	2,885	462	2,423				
Stark_Tract	Commercial-Personal and Repair Serv	Point	Count	2	19.0	2,505	476	2,029				
	Commercial-Professional - Technical S	Point	Count	1	35.0	2,354	824	1,530				
	Commercial-Retail Trade	Point	Count	1	20.0	3,782	756	3,026				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	11,771	25.0	3,884	971	2,913				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	157,829	25.0	31,566	7,891	23,674				
	hc ambulatory	Point	Count	4	14.0	0	-	-				
	hc nursing res	Point	Count	1	23.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	5	25.0	10,000	2,500	7,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,181	25.0	1,380	345	1,035				
	Religion - Churches and Other Non-pro	Point	Count	1	12.0	1,680	202	1,478				
	Residential - Duplex	Point	Count	29	32.0	7,938	2,540	5,398				
	Residential - Manuf. Housing	Point	Count	14	100.0	527	527	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	3	32.0	7,943	2,542	5,401				
	Residential - Multi-Dwellings - 20 to 49	Point	Count	1	32.0	15,653	5,009	10,644				
	Residential - Multi-Dwellings - 5 to 9 un	Point	Count	3	32.0	7,256	2,322	4,934				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	3	32.0	32,439	10,380	22,059				
	Residential - Single Family Dwelling	Point	Count	3,058	32.6	509,613	166,261	343,352				
	Residential - Triplex - Quads	Point	Count	10	32.0	5,428	1,737	3,691				
	Schools HAZUS SDURS	Point	Count	2	10.0	1,180	118	1,062	205,863	414,527	17,417	27,622
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,602	25.0	320	80	240				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	4,944	0.0	939	0	939				
	Residential - Single Family Dwelling	Point	Count	12	48.6	1,992	969	1,023				
	transln_ca	Linear	Length (ft)	14,137	0.0	3,481	-	3,481	1,049	1,023	66	4,660
Staten_Island	Commercial-Retail Trade	Point	Count	3	100.0	369	369	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,422	25.0	1,459	365	1,094				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	45,950	25.0	9,190	2,298	6,893				
	gas oil production fields	Point	Area	1,092	0.0	0	-	-				
	Gas oil wells	Point	Count	20	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	14,654	0.0	3,810	0	3,810				
	NG Wells	Point	Count	3	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	12	100.0	366	366	0				
	Residential - Single Family Dwelling	Point	Count	6	100.0	576	576	0	3,973	0	0	11,797
	Commercial-Professional - Technical S	Point	Count	1	44.0	143	63	80				
Stewart_Tract	Commercial-Retail Trade	Point	Count	1	30.0	486	146	340				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	29,052	25.0	5,810	1,453	4,358				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,513	25.0	1,489	372	1,117				
	Rail HAZUS SDURS	Linear	Length (ft)	4,671	25.0	1,331	333	998				
	Residential - Manuf. Housing	Point	Count	10	100.0	374	374	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	45.5	121	55	66				
	Residential - Single Family Dwelling	Point	Count	49	43.6	8,518	3,716	4,802				
	transln_ca	Linear	Length (ft)	20,855	0.0	5,135	-	5,135	8,011	9,788	144	11,608
Sutter Island	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,515	25.0	1,160	290	870				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	61,390	25.0	12,278	3,070	9,209				
	Gas oil wells	Point	Count	5	0.0	0	-	-				

Terminus_Tract 1	Hwy HAZUS SDURS	Linear	Length (ft)	5,146	25.0	1,698	425	1,274				
	Residential - Manuf. Housing	Point	Count	2	100.0	35	35	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	299	299	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	79	79	0				
	Residential - Single Family Dwelling	Point	Count	33	100.0	6,013	6,013	0	10,210	0	0	11,352
	Commercial-Professional - Technical S	Point	Count	4	38.0	8	3	5				
	Commercial-Retail Trade	Point	Count	4	23.0	32	7	25				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1,548	25.0	511	128	383				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	23,024	25.0	4,605	1,151	3,454				
	gas oil production fields	Point	Area	28	0.0	0	-	-				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,275	25.0	1,411	353	1,058				
	NG Pipelines	Linear	Length (ft)	651	0.0	150	0	150				
	Residential - Manuf. Housing	Point	Count	23	100.0	847	847	0				
Terminus_Tract 2	Residential - Single Family Dwelling	Point	Count	8	37.0	1,420	525	895				
	Schools HAZUS SDURS	Point	Count	4	10.0	2,360	236	2,124				
	transln ca	Linear	Length (ft)	8,057	0.0	1,984	-	1,984	5,251	9,048	333	7,028
	Agriculture	Point	Count	5	100.0	4,765	4,765	0				
	boatlaunch	Point	Count	5	100.0	500	500	0				
	Commercial-Professional - Technical S	Point	Count	5	100.0	360	360	0				
	Commercial-Retail Trade	Point	Count	5	100.0	1,770	1,770	0				
	Commercial-Wholesale Trade	Point	Count	5	100.0	8,050	8,050	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,781	25.0	918	229	688				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	256,731	25.0	51,346	12,837	38,510				
	gas oil production fields	Point	Area	303	0.0	0	-	-				
	Gas oil wells	Point	Count	9	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	5	25.0	10,000	2,500	7,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,771	25.0	1,574	394	1,181				
	NG Wells	Point	Count	1	0.0	0	-	-				
	Residential - Duplex	Point	Count	5	100.0	1,810	1,810	0				
Terminus_Tract 3	Residential - Manuf. Housing	Point	Count	544	100.0	18,545	18,545	0				
	Residential - Single Family Dwelling	Point	Count	216	100.0	29,210	29,210	0				
	US Cell Towers	Point	Count	5	0.0	1,250	-	1,250	80,970	8,750	96	40,379
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,060	25.0	212	53	159				
Twitchell_Island	Residential - Manuf. Housing	Point	Count	30	100.0	986	986	0				
	Residential - Single Family Dwelling	Point	Count	13	48.6	1,573	765	808	1,804	808	399	159
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	31,601	25.0	6,320	1,580	4,740				
	gas oil production fields	Point	Area	1,407	0.0	0	-	-				
	Gas oil wells	Point	Count	22	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	6,373	0.0	1,466	0	1,466				
	NG Wells	Point	Count	9	0.0	0	-	-				
	Residential - Duplex	Point	Count	2	100.0	364	364	0				
	Residential - Manuf. Housing	Point	Count	31	100.0	1,082	1,082	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	64	64	0				
	Residential - Single Family Dwelling	Point	Count	28	100.0	3,744	3,744	0				
	Residential - Triplex - Quads	Point	Count	2	100.0	270	270	0	7,104	0	0	6,206
Tyler_Island 2	airport points	Point	Count	1	25.0	0	-	-				
	Airports HAZUS SDURS	Point	Count	1	25.0	6,431	1,608	4,823				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,160	25.0	1,703	426	1,277				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	132,666	25.0	26,533	6,633	19,900				
	gas oil production fields	Point	Area	2,107	0.0	0	-	-				
	Gas oil wells	Point	Count	45	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	NG Pipelines	Linear	Length (ft)	14,527	0.0	3,051	0	3,051				
	NG Wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	1	100.0	106	106	0				
	Residential - Single Family Dwelling	Point	Count	13	100.0	2,321	2,321	0				
	Runway HAZUS SDURS	Point	Count	1	25.0	36,674	9,169	27,506				
	solid waste facilities	Point	Count	1	25.0	0	-	-	20,762	33,829	309	24,228
	Dams HAZUS SDURS	Point	Count	1	0.0	0	-	-				
Union_Island 1	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,457	25.0	2,131	533	1,598				

	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	242,177	25.0	48,435	12,109	36,327				
	gas oil production fields	Point	Area	226	0.0	0	-	-				
	Gas oil wells	Point	Count	13	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	17,354	0.0	3,297	0	3,297				
	NG Wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	11	100.0	356	356	0				
	Residential - Single Family Dwelling	Point	Count	54	100.0	8,465	8,465	0				
	transln_ca	Linear	Length (ft)	29,471	0.0	7,256	-	7,256	21,463	0	0	48,478
Union_Island 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,163	25.0	233	58	174				
	gas oil production fields	Point	Area	1	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,583	0.0	491	0	491	58	0	0	665
Union_Island 3	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	8,039	25.0	1,608	402	1,206				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	6,943	0.0	1,319	0	1,319				
	Residential - Single Family Dwelling	Point	Count	4	46.6	694	324	370				
	transln_ca	Linear	Length (ft)	14,550	0.0	3,582	-	3,582	726	370	22	6,107
Union_Island 4	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,881	25.0	1,376	344	1,032				
	gas oil production fields	Point	Area	70	0.0	0	-	-				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,029	0.0	196	0	196				
	transln_ca	Linear	Length (ft)	14,550	0.0	3,582	-	3,582	344	0	0	1,228
Upper_Roberts_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	161,666	25.0	32,333	8,083	24,250				
	gas oil production fields	Point	Area	849	0.0	0	-	-				
	Gas oil wells	Point	Count	23	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Nat Gas HAZUS SDURS	Point	Count	1	0.0	1,286	0	1,286				
	NG Pipelines	Linear	Length (ft)	13,507	0.0	2,566	0	2,566				
	NG Wells	Point	Count	17	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	8	100.0	221	221	0				
	Residential - Single Family Dwelling	Point	Count	62	37.0	10,671	3,948	6,723				
	transln_ca	Linear	Length (ft)	27,815	0.0	6,848	-	6,848	13,753	12,509	159	33,665
Van_Sickle_Island	gas oil production fields	Point	Area	149	0.0	0	-	-				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	2	100.0	391	391	0				
	sewage_treat	Point	Count	1	30.0	100,000	30,000	-	30,391	0	0	0
Veale_Tract 1	Commercial-Professional - Technical S	Point	Count	1	100.0	156	156	0				
	Commercial-Retail Trade	Point	Count	1	42.0	49	21	28				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,069	25.0	414	103	310				
	gas oil production fields	Point	Area	85	0.0	0	-	-				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	4	100.0	151	151	0				
	Residential - Single Family Dwelling	Point	Count	25	100.0	5,251	5,251	0				
	transln_ca	Linear	Length (ft)	14,590	0.0	4,698	-	4,698	5,682	28	1	5,008
Veale_Tract 2	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,270	25.0	454	114	341				
	NG Pipelines	Linear	Length (ft)	8	0.0	2	0	2				

	Gas oil wells	Point	Count	5	0.0	0	-	-				
	hc ambulatory	Point	Count	2	16.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Residential - Duplex	Point	Count	21	100.0	5,930	5,930	0				
	Residential - Manuf. Housing	Point	Count	11	100.0	435	435	0				
	Residential - Single Family Dwelling	Point	Count	203	100.0	36,236	36,236	0	47,518	4,500	430	5,955
Walthal_Tract	Commercial-Retail Trade	Point	Count	2	34.0	64	22	42				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,330	25.0	1,759	440	1,319				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	29,639	25.0	5,928	1,482	4,446				
	gas oil production fields	Point	Area	409	0.0	0	-	-				
	Gas oil wells	Point	Count	9	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	2,033	0.0	661	0	661				
	NG Wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	37	100.0	1,351	1,351	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	48.0	86	41	45				
	Residential - Single Family Dwelling	Point	Count	138	46.6	24,182	11,275	12,907				
	transln_ca	Linear	Length (ft)	3,992	0.0	983	-	983	15,611	15,994	374	7,409
Water Canal	gas oil production fields	Point	Area	1	0.0	0	-	-	0	0	#VALUE!	0
Water Zone 1	Commercial-Entertainment and Recrea	Point	Count	2	37.0	2,374	878	1,496				
	Commercial-Professional - Technical S	Point	Count	2	100.0	3,648	3,648	0				
	Commercial-Retail Trade	Point	Count	2	47.0	1,378	648	730				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,426	25.0	1,131	283	848				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	29,437	25.0	5,887	1,472	4,416				
	gas oil production fields	Point	Area	87	0.0	0	-	-				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	20,349	25.0	6,715	1,679	5,036				
	NG Pipelines	Linear	Length (ft)	546	0.0	153	0	153				
	Petroleum Pipelines	Linear	Length (ft)	138	0.0	29	0	29				
	Rail HAZUS SDURS	Linear	Length (ft)	25	25.0	7	2	5				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	128	128	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	100.0	510	510	0				
	Residential - Single Family Dwelling	Point	Count	36	100.0	7,903	7,903	0				
	transln_ca	Linear	Length (ft)	407	0.0	100	-	100	17,150	2,226	#VALUE!	10,587
Water Zone 2	Commercial-Professional - Technical S	Point	Count	2	100.0	10	10	0				
	Commercial-Retail Trade	Point	Count	2	38.0	4	2	2				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	17	25.0	3	1	3				
	gas oil production fields	Point	Area	36	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	1	25.0	0	0	0				
	transln_ca	Linear	Length (ft)	1	0.0	0	-	0	13	2	#VALUE!	3
Water Zone 3	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1	25.0	0	0	0				
	gas oil production fields	Point	Area	128	0.0	0	-	-				
	transln_ca	Linear	Length (ft)	1	0.0	0	-	0	0	0	#VALUE!	1
Water Zone 4	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	59	25.0	12	3	9				
	gas oil production fields	Point	Area	4	0.0	0	-	-				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	1	0.0	0	0	10,000				
	transln_ca	Linear	Length (ft)	1	0.0	0	-	0	3	0	#VALUE!	9
Water Zone 5	Delta Roads PBSJ Major Roads	Linear	Length (ft)	1	25.0	0	0	0				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1	25.0	0	0	0				
	gas oil production fields	Point	Area	4	0.0	0	-	-				
	transln_ca	Linear	Length (ft)	1	0.0	0	-	0	0	0	#VALUE!	1
Webb_Tract	gas oil production fields	Point	Area	83	0.0	0	-	-				
	Gas oil wells	Point	Count	10	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,292	0.0	245	0	245				
	NG Wells	Point	Count	1	0.0	0	-	-	0	0	0	245
West Sacramento North	Agriculture	Point	Count	2	100.0	5,538	5,538	0				
	airport points	Point	Count	3	25.0	0	-	-				
	boatlaunch	Point	Count	2	100.0	200	200	0				
	bridges not in HAZUS	Point	Count	6	25.0	6,000	1,500	4,500				
	Commercial-Entertainment and Recrea	Point	Count	7	45.0	5,138	2,312	2,826				

Commercial-Medical - Office Clinic	Point	Count	2	37.0	3,374	1,248	2,126				
Commercial-Personal and Repair Serv	Point	Count	7	100.0	10,606	10,606	0				
Commercial-Professional - Technical S	Point	Count	3	100.0	52,157	52,157	0				
Commercial-Retail Trade	Point	Count	2	100.0	36,408	36,408	0				
Commercial-Wholesale Trade	Point	Count	51	49.0	114,776	56,240	58,536				
Delta Roads PBSJ Major Roads	Linear	Length (ft)	43,306	25.0	14,291	3,573	10,718				
Delta Roads PBSJ Minor Roads	Linear	Length (ft)	257,089	25.0	51,418	12,854	38,563				
Government - General Services	Point	Count	2	100.0	1,616	1,616	0				
Hazmat HAZUS SDURS	Point	Count	21	0.0	0	-	-				
hc ambulatory	Point	Count	12	30.0	0	-	-				
hc hospitals	Point	Count	2	100.0	0	-	-				
hc nursing res	Point	Count	2	42.0	0	-	-				
Hwy Bridge HAZUS SDURS	Point	Count	7	25.0	14,000	3,500	10,500				
Hwy HAZUS SDURS	Linear	Length (ft)	18,424	25.0	6,080	1,520	4,560				
Industrial - Construction	Point	Count	5	100.0	8,843	8,843	0				
Industrial - Food - Drugs - Chemical	Point	Count	7	42.0	40,044	16,819	23,226				
Industrial - Heavy	Point	Count	6	100.0	18,747	18,747	0				
Industrial - Light	Point	Count	5	100.0	10,512	10,512	0				
Intermodal terminal facilities	Point	Count	5	0.0	0	-	-				
NG Pipelines	Linear	Length (ft)	10,883	0.0	2,830	0	2,830				
Petroleum Pipelines	Linear	Length (ft)	29,059	0.0	6,102	0	6,102				
pipeline trans	Point	Count	2	0.0	0	-	-				
Port HAZUS SDURS	Point	Count	5	0.0	12,862	0	12,862				
Rail 1000 nodes	Point	Count	17	0.0	0	-	-				
Rail Bridge HAZUS SDURS	Point	Count	5	25.0	5,000	1,250	3,750				
Rail Facility HAZUS SDURS	Point	Count	6	100.0	15,434	15,434	0				
Rail HAZUS SDURS	Linear	Length (ft)	47,823	25.0	13,630	3,407	10,222				
Religion - Churches and Other Non-pro	Point	Count	5	38.0	5,992	2,277	3,715				
Residential - Duplex	Point	Count	76	100.0	20,679	20,679	0				
Residential - Institutional Dormitory	Point	Count	2	42.0	6,990	2,936	4,054				
Residential - Manuf. Housing	Point	Count	555	100.0	18,975	18,975	0				
Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	20,942	20,942	0				
Residential - Multi-Dwellings - 5 to 9 un	Point	Count	2	100.0	25,186	25,186	0				
Residential - Multi-Dwellings - 50+ unit	Point	Count	2	100.0	34,532	34,532	0				
Residential - Single Family Dwelling	Point	Count	1,967	100.0	270,011	270,011	0				
Residential - Triplex - Quads	Point	Count	41	100.0	13,090	13,090	0				
sewage treat	Point	Count	2	30.0	200,000	60,000	-				
solid waste facilities	Point	Count	5	25.0	0	-	-				
TankFarms	Point	Count	3	0.0	9,000	-	9,000				
transin ca	Linear	Length (ft)	33,025	0.0	8,131	-	8,131				
Waste Water HAZUS SDURS	Point	Count	3	20.0	235,764	47,153	23,576				
water trans	Point	Count	5	0.0	0	-	-	780,065	158,670	2,384	81,127
West Sacramento South 1	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500			
Commercial-Professional - Technical S	Point	Count	2	100.0	2,906	2,906	0				
Commercial-Retail Trade	Point	Count	2	100.0	834	834	0				
Commercial-Wholesale Trade	Point	Count	2	100.0	6,100	6,100	0				
Communication HAZUS SDURS	Point	Count	3	100.0	354	354	0				
Delta Roads PBSJ Major Roads	Linear	Length (ft)	26,956	25.0	8,895	2,224	6,672				
Delta Roads PBSJ Minor Roads	Linear	Length (ft)	52,937	25.0	10,587	2,647	7,941				
gas oil production fields	Point	Area	80	0.0	0	-	-				
Gas oil wells	Point	Count	10	0.0	0	-	-				
Hwy HAZUS SDURS	Linear	Length (ft)	5,245	25.0	1,731	433	1,298				
Petroleum Pipelines	Linear	Length (ft)	12,899	0.0	2,709	0	2,709				
Rail Bridge HAZUS SDURS	Point	Count	2	25.0	2,000	500	1,500				
Rail HAZUS SDURS	Linear	Length (ft)	4,775	25.0	1,361	340	1,021				
Residential - Manuf. Housing	Point	Count	5	100.0	223	223	0				
Residential - Multi-Dwellings - 50+ unit	Point	Count	2	100.0	2	2	0				
Residential - Single Family Dwelling	Point	Count	376	100.0	71,767	71,767	0				
Substation CA	Point	Count	1	25.0	1,000	250	750				
transin ca	Linear	Length (ft)	7,713	0.0	1,899	-	1,899				
US Cell Towers	Point	Count	3	0.0	750	-	750	89,079	4,500	69	21,539
West Sacramento South 2	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,074	25.0	1,014	254	761			

	Petroleum Pipelines	Linear	Length (ft)	2,538	0.0	533	0	533	254	0	0	1,294
Woodward_Island	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	28,139	25.0	5,628	1,407	4,221				
	gas pipeline kinder morgan LS 9	Linear	Length (ft)	7,820	0.0	1,642	0	11,642				
	mokelumne aqueduct pipe	Linear	Length (ft)	23,350	0.0	116,750	8,873	0	10,280	0	0	5,863
Wright-Elmwood_Tract	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,702	25.0	1,940	485	1,455				
	Gas oil wells	Point	Count	2	0.0	0	-	-				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	54	54	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	43	43	0				
	Residential - Single Family Dwelling	Point	Count	4	100.0	836	836	0				
	transln_ca	Linear	Length (ft)	32,244	0.0	7,939	-	7,939	1,418	0	0	9,394
Yolo_Bypass	Commercial-Personal and Repair Serv	Point	Count	2	39.0	2,238	873	1,365				
	Commercial-Professional - Technical S	Point	Count	1	100.0	4,617	4,617	0				
	Commercial-Retail Trade	Point	Count	1	42.0	1,885	792	1,093				
	Commercial-Wholesale Trade	Point	Count	4	37.0	10,151	3,756	6,395				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	489	25.0	161	40	121				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	55,722	25.0	11,144	2,786	8,358				
	gas oil production fields	Point	Area	907	0.0	0	-	-				
	Gas oil wells	Point	Count	37	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	1	25.0	2,000	500	1,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,233	25.0	1,397	349	1,048				
	NG Pipelines	Linear	Length (ft)	31,732	0.0	6,029	0	6,029				
	Petroleum Pipelines	Linear	Length (ft)	9,809	0.0	2,060	0	2,060				
	Rail HAZUS SDURS	Linear	Length (ft)	8,046	25.0	2,293	573	1,720				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	100.0	6	6	0				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	100.0	17	17	0				
	Residential - Single Family Dwelling	Point	Count	1	100.0	317	317	0				
	transln_ca	Linear	Length (ft)	32,873	0.0	8,094	-	8,094	14,626	10,354	56	27,430
	Commercial-Retail Trade	Point	Count	2	30.0	354	106	248				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	12,876	25.0	4,249	1,062	3,187				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	30,677	25.0	6,135	1,534	4,602				
Zone 120	gas oil production fields	Point	Area	751	0.0	0	-	-				
	Gas oil wells	Point	Count	19	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	6,994	0.0	2,273	0	2,273				
	NG Wells	Point	Count	6	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	12	100.0	472	472	0				
	Residential - Single Family Dwelling	Point	Count	50	43.6	8,899	3,882	5,017				
	transln_ca	Linear	Length (ft)	7,869	0.0	1,937	-	1,937	7,056	5,264	92	11,999
	Residential - Single Family Dwelling	Point	Count	2	100.0	250	250	0	250	0	0	0
	Gas oil wells	Point	Count	2	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	2,273	0.0	432	0	432	0	0	0	432
Zone 122	Commercial-Retail Trade	Point	Count	2	47.0	106	50	56				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	354	25.0	117	29	88				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	22,598	25.0	4,520	1,130	3,390				
	Gas oil wells	Point	Count	5	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	9,687	25.0	3,197	799	2,398				
	Residential - Manuf. Housing	Point	Count	10	100.0	350	350	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	248	248	0				
	Residential - Single Family Dwelling	Point	Count	40	100.0	5,274	5,274	0				
	Schools HAZUS SDURS	Point	Count	2	28.0	1,180	330	850				
	transln_ca	Linear	Length (ft)	5,058	0.0	1,245	-	1,245	8,211	906	21	7,120
Zone 14	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	543	25.0	109	27	81				
	transln_ca	Linear	Length (ft)	769	0.0	189	-	189	27	0	0	271
Zone 148	boatlaunch	Point	Count	2	100.0	200	200	0				
	Commercial-Personal and Repair Serv	Point	Count	3	13.0	4,106	534	3,572				
	Commercial-Professional - Technical S	Point	Count	2	22.0	5,304	1,167	4,137				
	Commercial-Retail Trade	Point	Count	2	16.0	8,644	1,383	7,261				
	Commercial-Wholesale Trade	Point	Count	2	11.0	7,660	843	6,817				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,757	25.0	2,230	557	1,672				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	97,442	25.0	19,488	4,872	14,616				
	Hazmat HAZUS SDURS	Point	Count	9	0.0	0	-	-				
	hc ambulatory	Point	Count	3	12.0	0	-	-				
	hc nursing_res	Point	Count	2	7.0	0	-	-				
Zone 155	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	543	25.0	109	27	81				
	transln_ca	Linear	Length (ft)	769	0.0	189	-	189	27	0	0	271
Zone 158 (Smith Tract_2)	boatlaunch	Point	Count	2	100.0	200	200	0				
	Commercial-Personal and Repair Serv	Point	Count	3	13.0	4,106	534	3,572				
	Commercial-Professional - Technical S	Point	Count	2	22.0	5,304	1,167	4,137				
	Commercial-Retail Trade	Point	Count	2	16.0	8,644	1,383	7,261				
	Commercial-Wholesale Trade	Point	Count	2	11.0	7,660	843	6,817				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,757	25.0	2,230	557	1,672				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	97,442	25.0	19,488	4,872	14,616				
	Hazmat HAZUS SDURS	Point	Count	9	0.0	0	-	-				
	hc ambulatory	Point	Count	3	12.0	0	-	-				
	hc nursing_res	Point	Count	2	7.0	0	-	-				

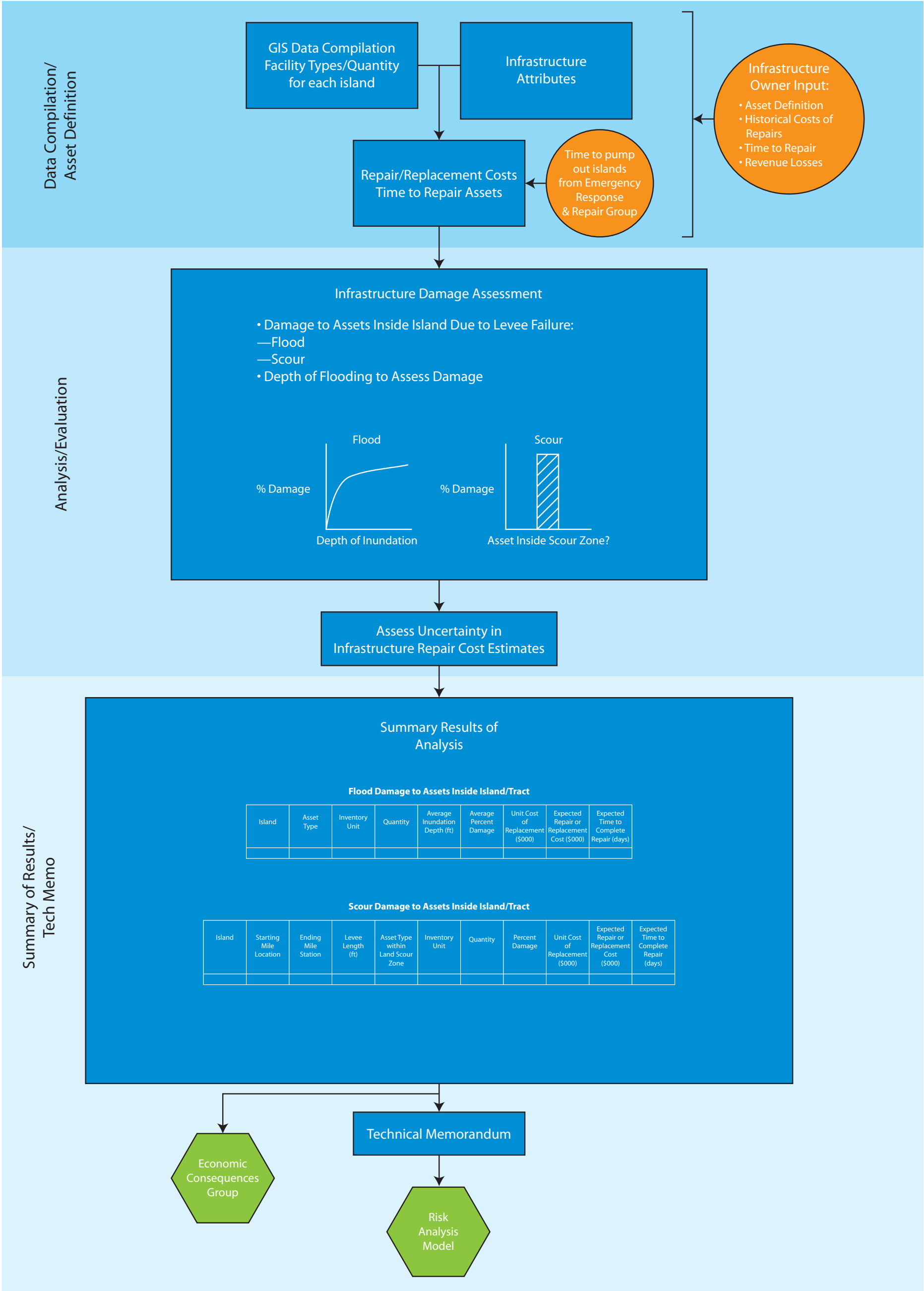
	Hwy Bridge HAZUS SDURS	Point	Count	10	25.0	20,000	5,000	15,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	7,666	25.0	2,530	632	1,897				
	Residential - Duplex	Point	Count	47	25.5	13,455	3,431	10,024				
	Residential - Manuf. Housing	Point	Count	27	100.0	895	895	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	25.5	100	26	75				
	Residential - Single Family Dwelling	Point	Count	1,374	25.8	190,681	49,100	141,581				
	Residential - Triplex - Quads	Point	Count	57	25.5	17,189	4,383	12,806				
	Schools HAZUS SDURS	Point	Count	2	9.0	1,180	106	1,074				
	Utilities	Point	Count	2	0.0	0	-	-	73,130	202,346	21,023	18,186
Zone 160	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	9,676	25.0	1,935	484	1,451				
	Residential - Single Family Dwelling	Point	Count	74	37.0	9,661	3,574	6,086	4,058	6,086	1,212	1,451
Zone 162	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,772	25.0	954	239	716				
	NG Pipelines	Linear	Length (ft)	2,642	0.0	502	0	502				
	Residential - Manuf. Housing	Point	Count	2	100.0	84	84	0				
	Residential - Single Family Dwelling	Point	Count	12	100.0	2,566	2,566	0	2,888	0	0	1,218
Zone 171	Commercial-Retail Trade	Point	Count	2	20.0	70	14	56				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	6,866	25.0	2,266	566	1,699				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,153	25.0	831	208	623				
	gas oil production fields	Point	Area	790	0.0	0	-	-				
	Gas oil wells	Point	Count	14	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,348	25.0	1,435	359	1,076				
	NG Pipelines	Linear	Length (ft)	15,491	0.0	5,035	0	5,035				
	Rail HAZUS SDURS	Linear	Length (ft)	4,827	25.0	1,376	344	1,032				
	Residential - Single Family Dwelling	Point	Count	4	32.6	685	224	462	3,714	6,518	119	9,465
Zone 185	Commercial-Personal and Repair Serv	Point	Count	1	16.0	1,409	225	1,184				
	Commercial-Professional - Technical S	Point	Count	1	28.0	4,243	1,188	3,055				
	Commercial-Retail Trade	Point	Count	1	18.0	715	129	586				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	100,663	25.0	20,133	5,033	15,099				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	hc nursing res	Point	Count	4	18.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	3	25.0	6,000	1,500	4,500				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,863	25.0	1,275	319	956				
	Residential - Duplex	Point	Count	43	28.5	10,969	3,126	7,843				
	Residential - Institutional Dormitory	Point	Count	5	15.0	23,034	3,455	19,579				
	Residential - Manuf. Housing	Point	Count	10	100.0	316	316	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	1	28.5	532	152	380				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	1	28.5	16,268	4,636	11,632				
	Residential - Single Family Dwelling	Point	Count	2,234	29.3	427,503	125,045	302,458				
	Residential - Triplex - Quads	Point	Count	7	28.5	2,573	733	1,840				
	Residential - Nursing Home	Point	Count	2	15.0	5,740	861	4,879				
	Schools HAZUS SDURS	Point	Count	1	13.0	590	77	513	146,795	358,449	27,376	16,056
Zone 186	transln ca	Linear	Length (ft)	13,335	0.0	3,283	-	3,283	0	0	0	3,283
Zone 197	Commercial-Professional - Technical S	Point	Count	2	100.0	4	4	0				
	Commercial-Retail Trade	Point	Count	2	100.0	56	56	0				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,871	25.0	1,607	402	1,206				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	42,307	25.0	8,461	2,115	6,346				
	Gas oil wells	Point	Count	4	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	35,965	25.0	11,868	2,967	8,901				
	NG Pipelines	Linear	Length (ft)	5,539	0.0	1,800	0	1,800				
	Rail 1000 nodes	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	22	100.0	760	760	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	100.0	520	520	0				
	Residential - Single Family Dwelling	Point	Count	81	100.0	11,412	11,412	0	18,236	0	0	18,253
Zone 206	bridges not in HAZUS	Point	Count	2	25.0	2,000	500	1,500				
	Commercial-Entertainment and Recrea	Point	Count	2	18.0	1,716	309	1,407				
	Commercial-Personal and Repair Serv	Point	Count	2	22.0	1,753	386	1,367				
	Commercial-Professional - Technical S	Point	Count	1	38.0	1,672	635	1,037				
	Commercial-Retail Trade	Point	Count	1	23.0	875	201	674				
	Commercial-Wholesale Trade	Point	Count	2	19.0	3,378	642	2,736				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	5,592	25.0	1,845	461	1,384				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	7,483	25.0	1,497	374	1,122				

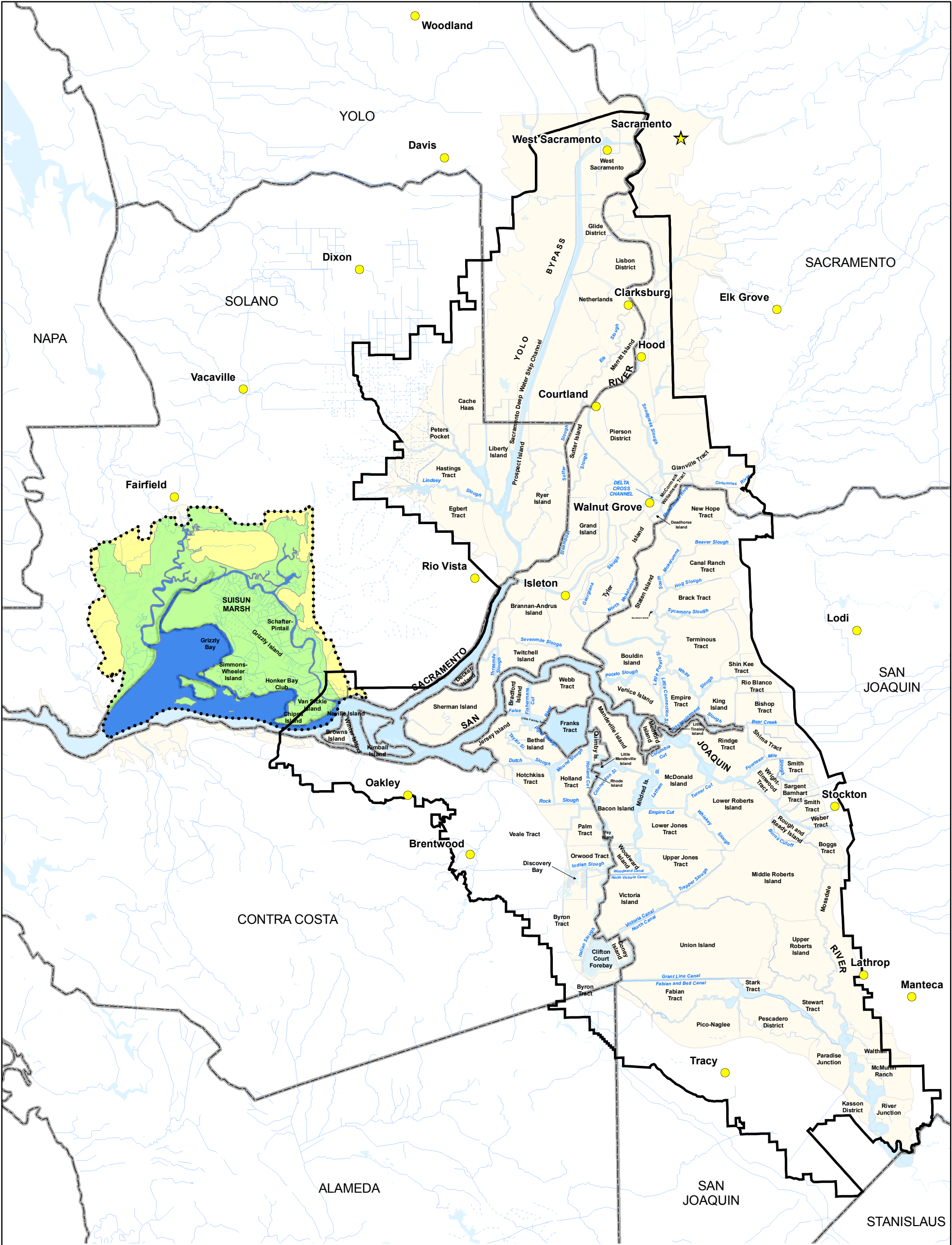
	Elec Power HAZUS SDURS	Point	Count	1	100.0	129,800	129,800	0				
	gas oil production fields	Point	Area	113	0.0	0	-	-				
	Gas oil wells	Point	Count	7	0.0	0	-	-				
	Government - General Services	Point	Count	1	15.0	587	88	499				
	Hazmat HAZUS SDURS	Point	Count	28	0.0	0	-	-				
	mokelumne aqueduct pipe	Linear	Length (ft)	4,990	0.0	24,950	1,896	23,054				
	Oil HAZUS SDURS	Point	Count	1	20.0	118	24	94				
	Petroleum Pipelines	Linear	Length (ft)	56,142	0.0	11,790	0	11,790				
	Rail 1000 nodes	Point	Count	3	0.0	0	-	-				
	Rail HAZUS SDURS	Linear	Length (ft)	14,693	25.0	4,188	1,047	3,141				
	Residential - Institutional Dormitory	Point	Count	1	16.0	3,144	503	2,641				
	transln_ca	Linear	Length (ft)	9,175	0.0	2,259	-	2,259	136,866	11,955	259	42,750
Zone 207	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	5,102	25.0	1,020	255	765				
	Petroleum Pipelines	Linear	Length (ft)	2,447	0.0	514	0	514				
	Rail HAZUS SDURS	Linear	Length (ft)	20,443	25.0	5,826	1,457	4,370	1,712	0	0	5,649
Zone 214	gas oil production fields	Point	Area	172	0.0	0	-	-				
	Gas oil wells	Point	Count	9	0.0	0	-	-				
	NG Pipelines	Linear	Length (ft)	1,419	0.0	270	0	270				
	NG Wells	Point	Count	2	0.0	0	-	-	0	0	0	270
Zone 216	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Residential - Single Family Dwelling	Point	Count	3	48.6	701	341	360	341	360	99	0
Zone 31	Residential - Single Family Dwelling	Point	Count	3	37.0	645	239	406	239	406	166	0
Zone 33	Residential - Single Family Dwelling	Point	Count	2	37.0	326	121	205	121	205	115	0
Zone 36	Commercial-Professional - Technical S	Point	Count	2	22.0	38	8	30				
	Commercial-Retail Trade	Point	Count	2	16.0	84	13	71				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	459	25.0	151	38	114				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,606	25.0	921	230	691				
	Hwy HAZUS SDURS	Linear	Length (ft)	783	25.0	258	65	194				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	25.5	34	9	25				
	Residential - Single Family Dwelling	Point	Count	28	25.8	6,337	1,632	4,705				
	solid waste facilities	Point	Count	2	25.0	0	-	-				
	transln_ca	Linear	Length (ft)	3,946	0.0	972	-	972	1,995	4,831	834	1,970
Zone 37	Commercial-Entertainment and Recrea	Point	Count	3	12.0	5,313	638	4,675				
	Commercial-Personal and Repair Serv	Point	Count	5	13.0	5,178	673	4,504				
	Commercial-Professional - Technical S	Point	Count	3	22.0	15,444	3,398	12,046				
	Commercial-Retail Trade	Point	Count	3	16.0	5,706	913	4,793				
	Commercial-Wholesale Trade	Point	Count	3	11.0	6,657	732	5,925				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,472	25.0	1,476	369	1,107				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	34,426	25.0	6,885	1,721	5,164				
	hc ambulatory	Point	Count	3	16.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	388	25.0	128	32	96				
	Industrial - Heavy	Point	Count	7	15.0	17,498	2,625	14,873				
	Industrial - Light	Point	Count	3	17.0	7,008	1,191	5,817				
	Intermodal terminal facilities	Point	Count	3	0.0	0	-	-				
	Petroleum Pipelines	Linear	Length (ft)	7,203	0.0	1,513	0	1,513				
	Rail 1000 nodes	Point	Count	3	0.0	0	-	-				
	Rail Facility HAZUS SDURS	Point	Count	3	25.0	7,717	1,929	5,788				
	Rail HAZUS SDURS	Linear	Length (ft)	6,429	25.0	1,832	458	1,374				
	Residential - Duplex	Point	Count	23	25.5	6,583	1,679	4,904				
	Residential - Manuf. Housing	Point	Count	349	100.0	11,907	11,907	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	3	25.5	4,095	1,044	3,051				
	Residential - Multi-Dwellings - 20 to 49	Point	Count	3	25.5	17,202	4,387	12,815				
	Residential - Multi-Dwellings - 5 to 9 ur	Point	Count	10	25.5	16,850	4,297	12,553				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	3	25.5	5,367	1,369	3,998				
	Residential - Single Family Dwelling	Point	Count	467	25.8	72,891	18,769	54,121				
	Residential - Triplex - Quads	Point	Count	23	25.5	6,392	1,630	4,762				
	Waste Water HAZUS SDURS	Point	Count	3	20.0	235,764	47,153	23,576				
	water_trans	Point	Count	5	0.0	0	-	-	106,913	178,203	14,874	9,254
Zone 38	Commercial-Entertainment and Recrea	Point	Count	2	14.0	2,734	383	2,351				
	Commercial-Personal and Repair Serv	Point	Count	4	16.0	4,272	684	3,588				
	Commercial-Professional - Technical S	Point	Count	2	28.0	4,208	1,178	3,030				
	Commercial-Retail Trade	Point	Count	2	18.0	4,086	735	3,351				

	Commercial-Wholesale Trade	Point	Count	4	13.0	8,823	1,147	7,676				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,630	25.0	868	217	651				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,247	25.0	3,649	912	2,737				
	Education - Colleges - Universities	Point	Count	2	9.0	10,556	950	9,606				
	Hazmat HAZUS SDURS	Point	Count	3	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	1,608	25.0	531	133	398				
	Industrial - Food - Drugs - Chemical	Point	Count	2	22.0	7,536	1,658	5,878				
	Industrial - Heavy	Point	Count	2	19.0	3,124	594	2,530				
	NG Pipelines	Linear	Length (ft)	875	0.0	166	0	166				
	Petroleum Pipelines	Linear	Length (ft)	80,209	0.0	16,844	0	16,844				
	Port HAZUS SDURS	Point	Count	2	0.0	5,145	0	5,145				
	Rail 1000 nodes	Point	Count	4	0.0	0	-	-				
	Rail Facility HAZUS SDURS	Point	Count	2	25.0	5,145	1,286	3,859				
	Rail HAZUS SDURS	Linear	Length (ft)	26,921	25.0	7,672	1,918	5,754				
	Residential - Duplex	Point	Count	7	28.5	1,288	367	921				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	28.5	248	71	177				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	28.5	1,096	312	784				
	Residential - Single Family Dwelling	Point	Count	39	29.3	6,776	1,982	4,794				
	transln_ca	Linear	Length (ft)	1,579	0.0	389	-	389	15,527	56,689	8,704	26,939
Zone 64	Commercial-Professional - Technical S	Point	Count	2	22.0	504	111	393				
	Commercial-Retail Trade	Point	Count	2	16.0	444	71	373				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	342	25.0	68	17	51				
	gas oil production fields	Point	Area	171	0.0	0	-	-				
	Gas oil wells	Point	Count	1	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,245	25.0	1,071	268	803				
	Industrial - Construction	Point	Count	2	37.0	2,304	852	1,452				
	NG Pipelines	Linear	Length (ft)	2,175	0.0	413	0	413				
	Residential - Manuf. Housing	Point	Count	3	100.0	143	143	0				
	Residential - Single Family Dwelling	Point	Count	29	25.8	5,192	1,337	3,855	2,799	6,073	5,292	1,268
Zone 65	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	1,749	25.0	350	87	262	87	0	0	262
Zone 69	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	4,234	25.0	847	212	635				
	gas oil production fields	Point	Area	18	0.0	0	-	-				
	Gas oil wells	Point	Count	2	0.0	0	-	-	212	0	0	635
Zone 74	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,314	25.0	1,424	356	1,068				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	22,940	25.0	4,588	1,147	3,441				
	gas oil production fields	Point	Area	506	0.0	0	-	-				
	Gas oil wells	Point	Count	19	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	2,004	25.0	661	165	496				
	NG Pipelines	Linear	Length (ft)	6,878	0.0	1,307	0	1,307				
	Petroleum Pipelines	Linear	Length (ft)	2,062	0.0	433	0	433				
	Rail HAZUS SDURS	Linear	Length (ft)	2,056	25.0	586	146	439				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	38.5	74	28	46				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	38.5	210	81	129				
	Residential - Single Family Dwelling	Point	Count	8	37.0	1,587	587	1,000				
	transln_ca	Linear	Length (ft)	7,333	0.0	1,805	-	1,805	2,511	1,175	33	8,989
Zone 75	bridges not in HAZUS	Point	Count	3	25.0	3,000	750	2,250				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	425	25.0	140	35	105				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	21,073	25.0	4,215	1,054	3,161				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	6,027	25.0	1,989	497	1,492				
	Residential - Manuf. Housing	Point	Count	2	100.0	104	104	0				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	48.0	56	27	29				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	48.0	308	148	160				
	Residential - Single Family Dwelling	Point	Count	36	46.6	7,523	3,507	4,015				
	solid_waste_facilities	Point	Count	2	25.0	0	-	-	6,122	6,455	171	4,758
Zone 77	Commercial-Professional - Technical S	Point	Count	2	22.0	264	58	206				
	Commercial-Retail Trade	Point	Count	2	16.0	206	33	173				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	8,434	25.0	2,783	696	2,087				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	2,294	25.0	459	115	344				
	Rail HAZUS SDURS	Linear	Length (ft)	4,346	25.0	1,239	310	929				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	25.5	12	3	9				

Zone 78	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	25.5	220	56	164	2,438	3,918	510	4,424
	Residential - Single Family Dwelling	Point	Count	22	25.8	4,533	1,167	3,366				
	transln_ca	Linear	Length (ft)	4,318	0.0	1,063	-	1,063				
	bridges not in HAZUS	Point	Count	4	25.0	4,000	1,000	3,000				
	Commercial-Professional - Technical S	Point	Count	2	41.0	154	63	91				
	Commercial-Retail Trade	Point	Count	2	26.0	62	16	46				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	4,347	25.0	1,435	359	1,076				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	6,088	25.0	1,218	304	913				
	Gas oil wells	Point	Count	2	0.0	0	-	-				
	Hwy HAZUS SDURS	Linear	Length (ft)	5,142	25.0	1,697	424	1,273				
	NG Pipelines	Linear	Length (ft)	51	0.0	17	0	17				
	Rail HAZUS SDURS	Linear	Length (ft)	2,168	25.0	618	154	463				
	Residential - Multi-Dwellings - 10 to 19	Point	Count	2	43.0	30	13	17				
	Residential - Multi-Dwellings - 50+ unit	Point	Count	2	43.0	246	106	140				
Zone 79	Residential - Single Family Dwelling	Point	Count	29	39.1	5,602	2,192	3,410	4,631	6,704	185	4,298
	transln_ca	Linear	Length (ft)	2,258	0.0	556	-	556				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	19,879	25.0	3,976	994	2,982				
	Gas oil wells	Point	Count	3	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	4,899	0.0	931	0	931				
	Residential - Single Family Dwelling	Point	Count	3	37.0	431	159	271				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	2,594	25.0	856	214	642				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	18,727	25.0	3,745	936	2,809				
	gas oil production fields	Point	Area	514	0.0	0	-	-				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	6,091	0.0	1,157	0	1,157				
	NG Wells	Point	Count	1	0.0	0	-	-				
Zone 80	Petroleum Pipelines	Linear	Length (ft)	1,030	0.0	216	0	216	2,153	3,271	131	3,913
	Residential - Single Family Dwelling	Point	Count	2	32.6	450	147	303				
	transln_ca	Linear	Length (ft)	2,416	0.0	595	-	595				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,631	25.0	2,726	682	2,045				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	5,161	0.0	981	0	981				
	NG Wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	40	40	0				
	Residential - Single Family Dwelling	Point	Count	8	39.1	1,472	576	896				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,109	25.0	1,026	256	769				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	703	25.0	141	35	105				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,110	25.0	1,026	257	770				
	NG Pipelines	Linear	Length (ft)	10,955	0.0	2,081	0	2,081				
Zone 81	transln_ca	Linear	Length (ft)	2,387	0.0	769	-	769	2,297	3,303	113	5,420
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	13,631	25.0	2,726	682	2,045				
	Gas oil wells	Point	Count	6	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	2	25.0	4,000	1,000	3,000				
	NG Pipelines	Linear	Length (ft)	5,161	0.0	981	0	981				
	NG Wells	Point	Count	2	0.0	0	-	-				
	Residential - Manuf. Housing	Point	Count	2	100.0	40	40	0				
	Residential - Single Family Dwelling	Point	Count	8	39.1	1,472	576	896				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	3,109	25.0	1,026	256	769				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	703	25.0	141	35	105				
	Hwy HAZUS SDURS	Linear	Length (ft)	3,110	25.0	1,026	257	770				
	NG Pipelines	Linear	Length (ft)	10,955	0.0	2,081	0	2,081				
	transln_ca	Linear	Length (ft)	2,387	0.0	769	-	769				
	Commercial-Professional - Technical S	Point	Count	2	28.0	344	96	248				
Zone 82	Commercial-Retail Trade	Point	Count	2	18.0	1,810	326	1,484	548	0	0	4,495
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,390	25.0	3,099	775	2,324				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	16,336	25.0	3,267	817	2,450				
	Hazmat HAZUS SDURS	Point	Count	38	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,141	25.0	1,367	342	1,025				
	Industrial - Food - Drugs - Chemical	Point	Count	2	22.0	8,388	1,845	6,543				
	Oil HAZUS SDURS	Point	Count	1	20.0	118	24	94				
	Petroleum Pipelines	Linear	Length (ft)	119,148	0.0	25,021	0	25,021				
	Rail HAZUS SDURS	Linear	Length (ft)	9,484	25.0	2,703	676	2,027				
	Residential - Single Family Dwelling	Point	Count	44	29.3	8,119	2,375	5,744				
	solid waste facilities	Point	Count	4	25.0	0	-	-				
	TankFarms	Point	Count	2	0.0	6,000	-	6,000				
	transln_ca	Linear	Length (ft)	7,135	0.0	1,757	-	1,757				
Zone 90	Commercial-Professional - Technical S	Point	Count	2	28.0	344	96	248	9,275	26,113	764	34,604
	Commercial-Retail Trade	Point	Count	2	18.0	1,810	326	1,484				
	Delta Roads PBSJ Major Roads	Linear	Length (ft)	9,390	25.0	3,099	775	2,324				
	Delta Roads PBSJ Minor Roads	Linear	Length (ft)	16,336	25.0	3,267	817	2,450				
	Hazmat HAZUS SDURS	Point	Count	38	0.0	0	-	-				
	Hwy Bridge HAZUS SDURS	Point	Count	4	25.0	8,000	2,000	6,000				
	Hwy HAZUS SDURS	Linear	Length (ft)	4,141	25.0	1,367	342	1,025				
	Industrial - Food - Drugs - Chemical	Point	Count	2	22.0	8,388	1,845	6,543				
	Oil HAZUS SDURS	Point	Count	1	20.0	118	24	94				
	Petroleum Pipelines	Linear	Length (ft)	119,148	0.0	25,021	0	25,021				
	Rail HAZUS SDURS	Linear	Length (ft)	9,484	25.0	2,703	676	2,027				
	Residential - Single Family Dwelling	Point	Count	44	29.3	8,119	2,375	5,744				
	solid waste facilities	Point	Count	4	25.0	0	-	-				
	TankFarms	Point	Count	2	0.0	6,000	-	6,000				
	transln_ca	Linear	Length (ft)	7,135	0.0	1,757	-	1,757				

Figures





Legend

- CA Counties

Legal Delta

Suisun Marsh
- Primary Management Area

Primary Management Area - Water

Secondary Management Area
- Intermittent canal, ditch, aqueduct, stream, river, or wash

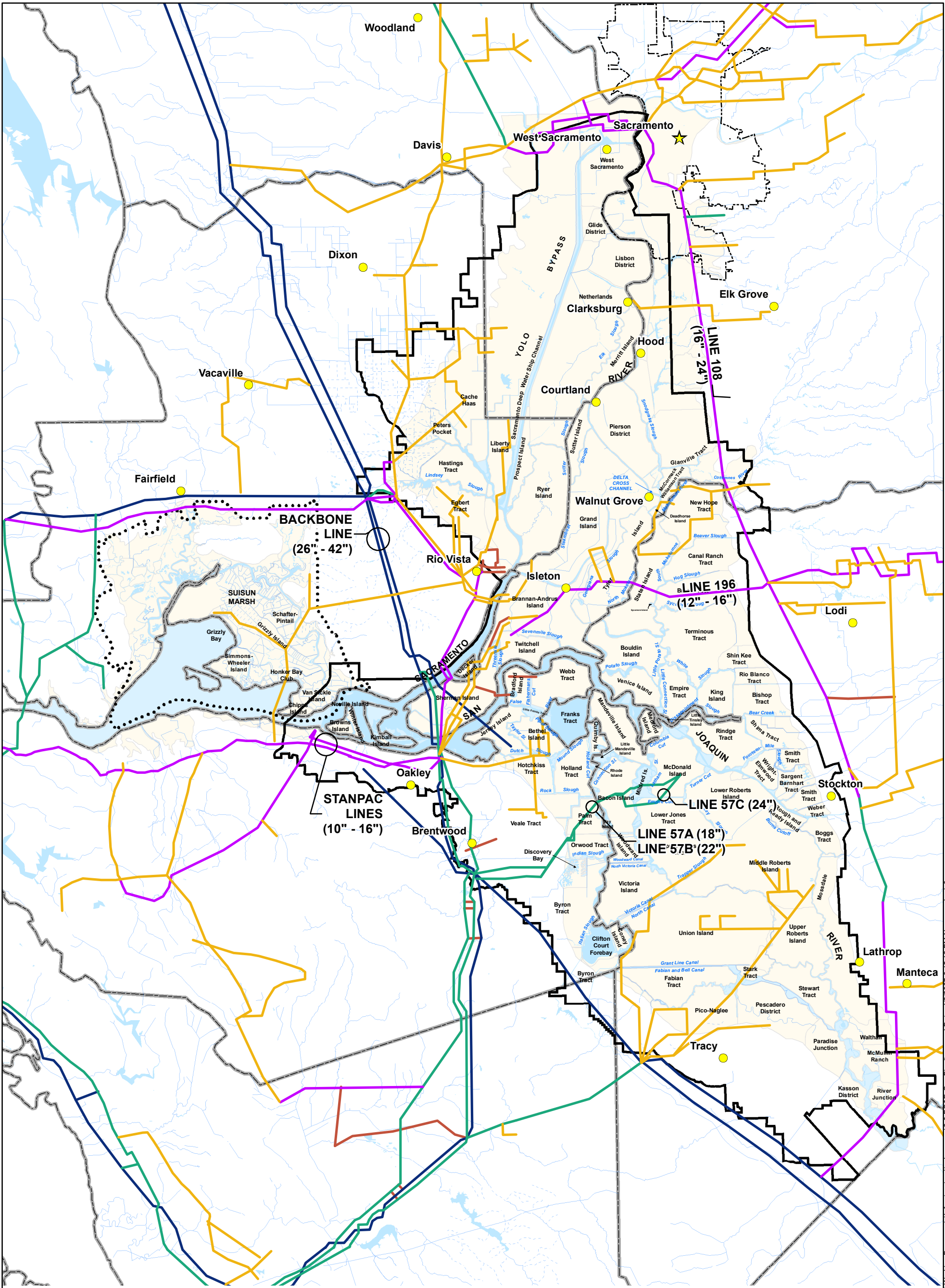
Perennial canal, ditch, or aqueduct; stream, river; reservoir

CA Water

0 5 10 Miles



	DRMS	Delta Islands & Sloughs	Figure 2-1
	26815431		



NOTE: This map was modified based on information provided by PG&E (see Appendix B).

Legend

PG&E Natural Gas Pipelines
(Diameter in Inches)

Unknown Diameter

2 - 12

13 - 17

18 - 24

25 - 42

Intermittent canal, ditch, aqueduct, stream, river, or wash

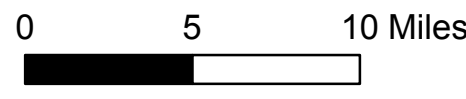
Perennial canal, ditch, or aqueduct; stream, river; reservoir

CA Water

CA Counties

Legal Delta

Suisun Marsh



DRMS

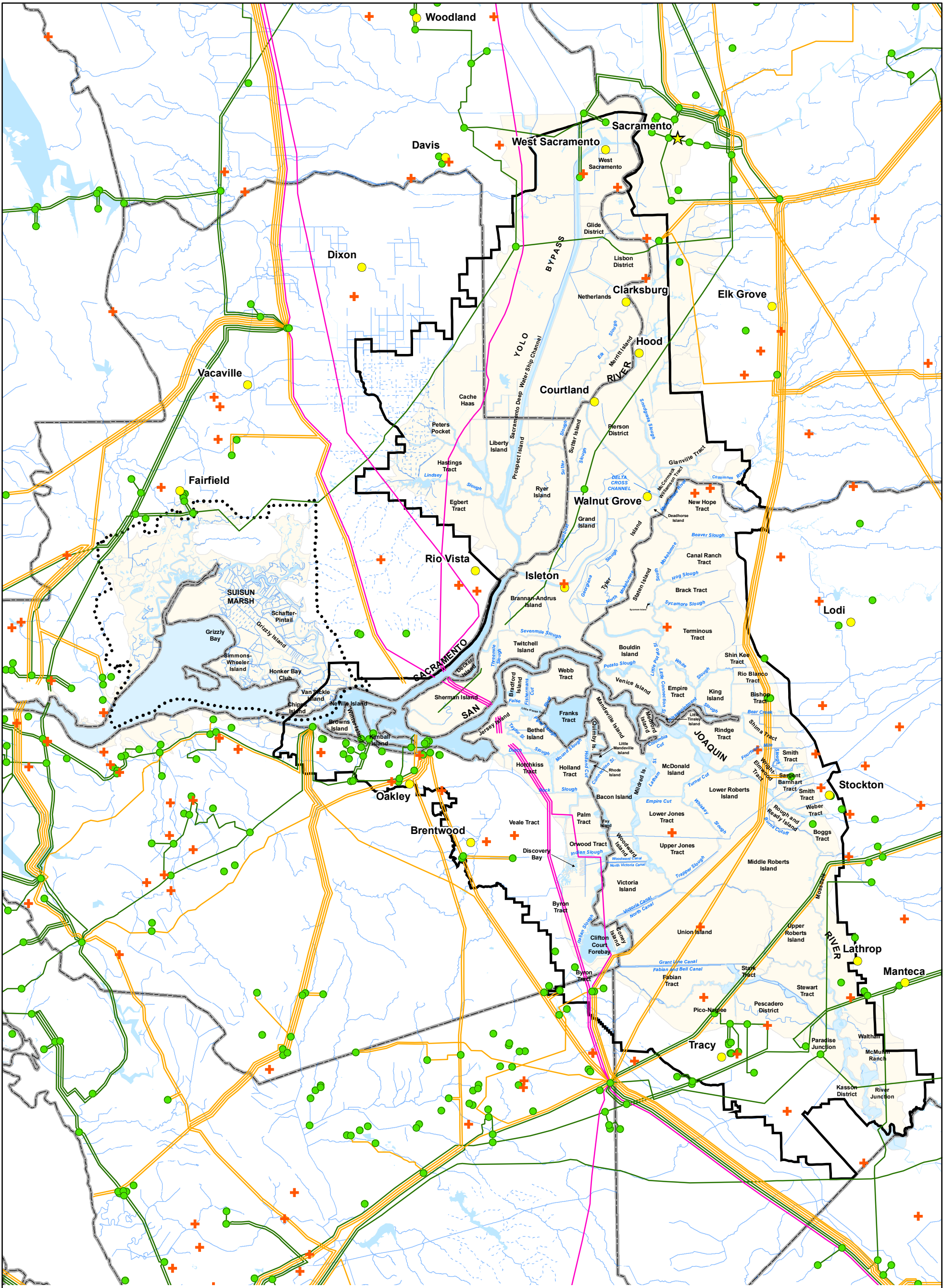
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PG&E

Natural Gas Pipelines

Figure

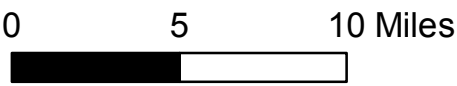
2-2



Legend

- Substations
 - ✚ US Cell Towers
- Transmission Lines**

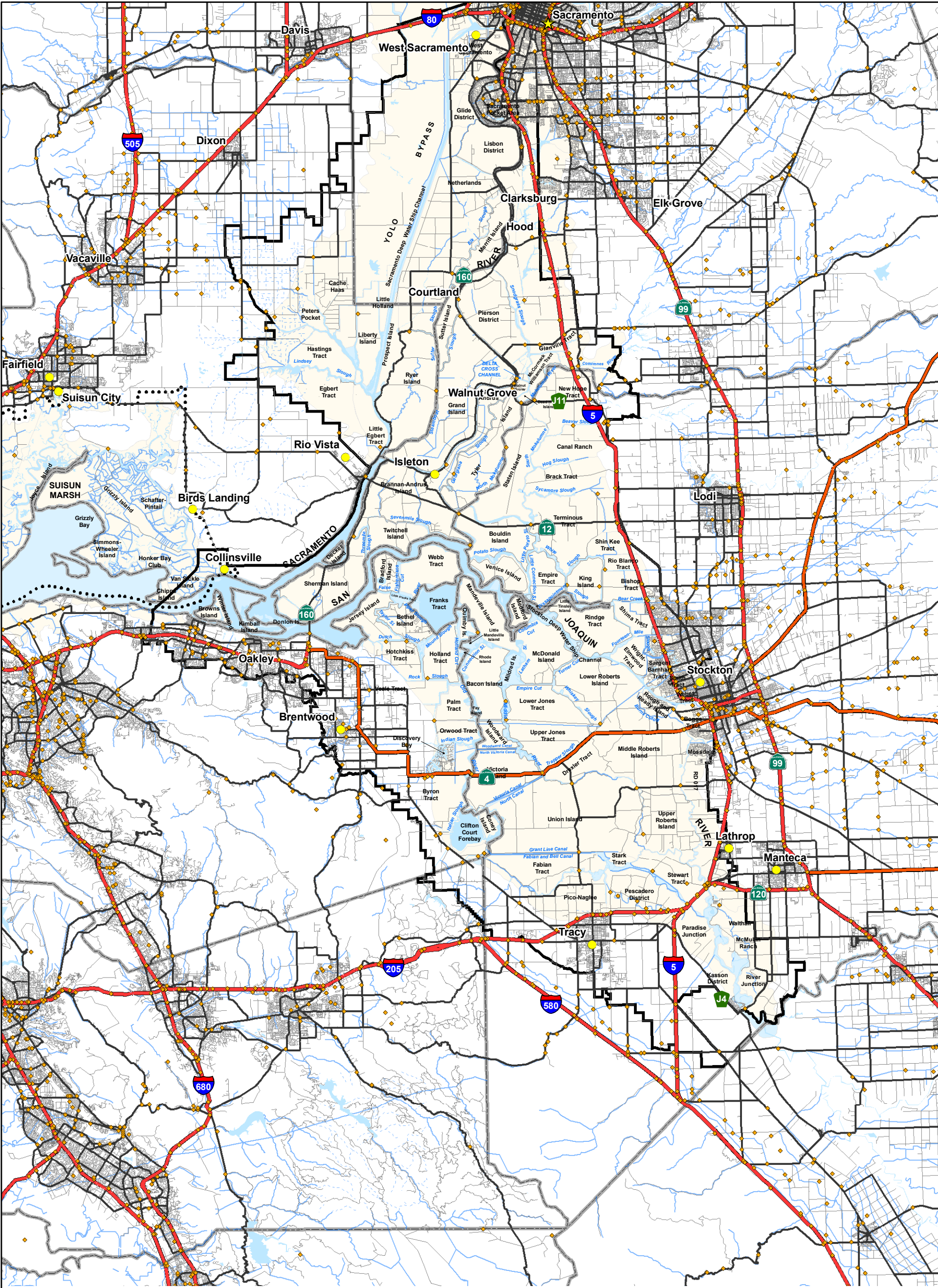
 - 230kV - 344kV
 - 500kV - 734kV
 - Below 230kV
- Intermittent canal, ditch, aqueduct, stream, river, or wash
 - Perennial canal, ditch, or aqueduct; stream, river; reservoir
 - CA Water
- ▭ CA Counties
 - ⊕ Legal Delta
 - ⋯ Suisun Marsh



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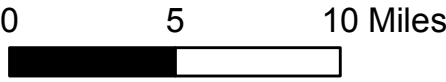
Transmission Lines,
Substations & Cell Towers

Figure
2-3



Legend

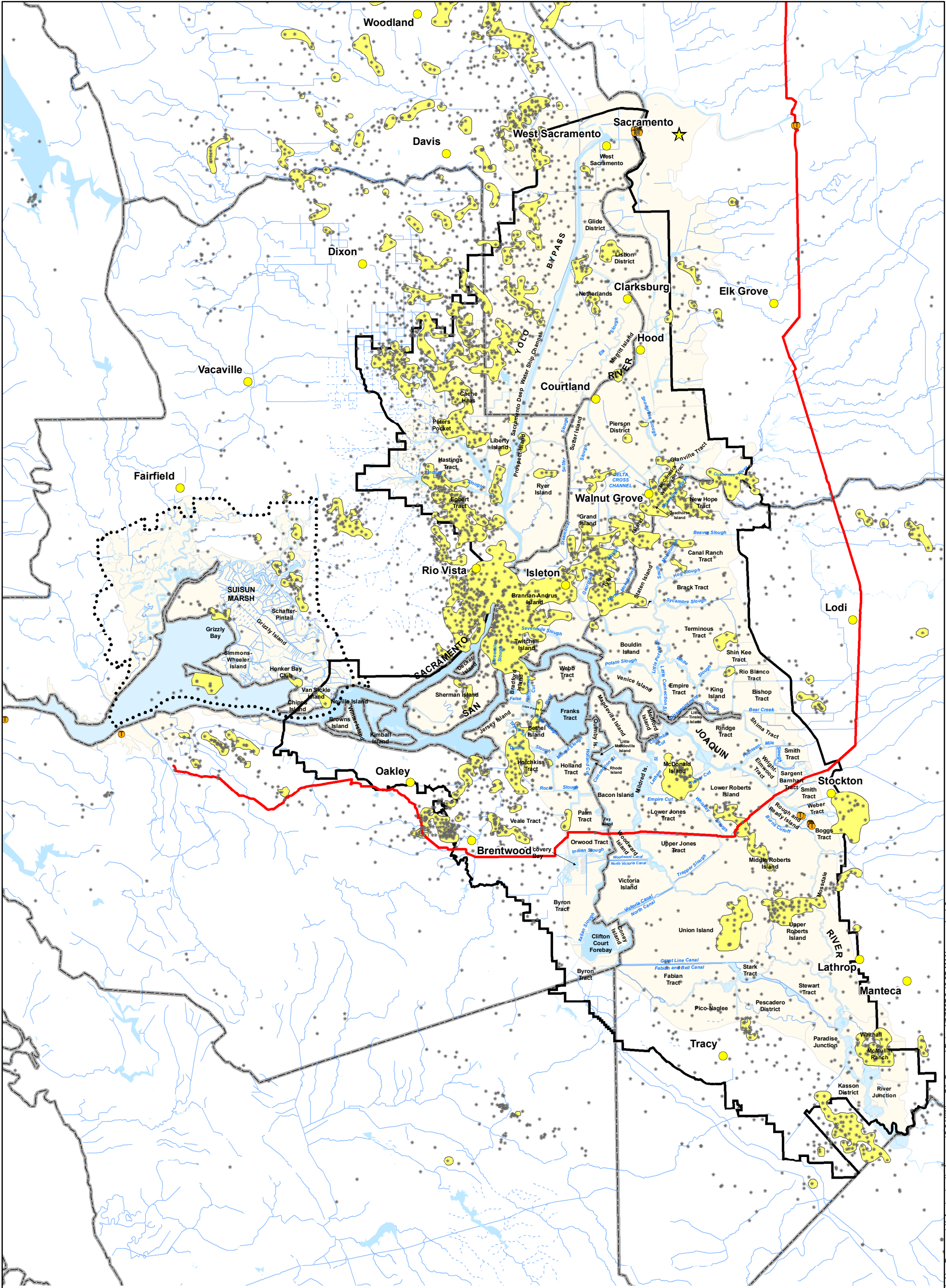
- Highway
- Major Road
- Local Road
- Bridges
- Intermittent canal, ditch, aqueduct, stream, river, or wash
- Perennial canal, ditch, or aqueduct; stream, river; reservoir
- CA Water
- CA Counties
- Legal Delta
- Suisun Marsh



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Highways and Roads

Figure
2-4



Legend

- Tank Farm

Gas and Oil Well

Kinder Morgan Gas Pipeline LS9

Gas and Oil Production Field

Intermittent canal, ditch, aqueduct, stream, river, or wash

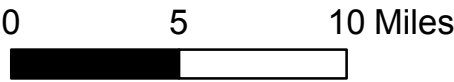
Perennial canal, ditch, or aqueduct; stream, river; reservoir

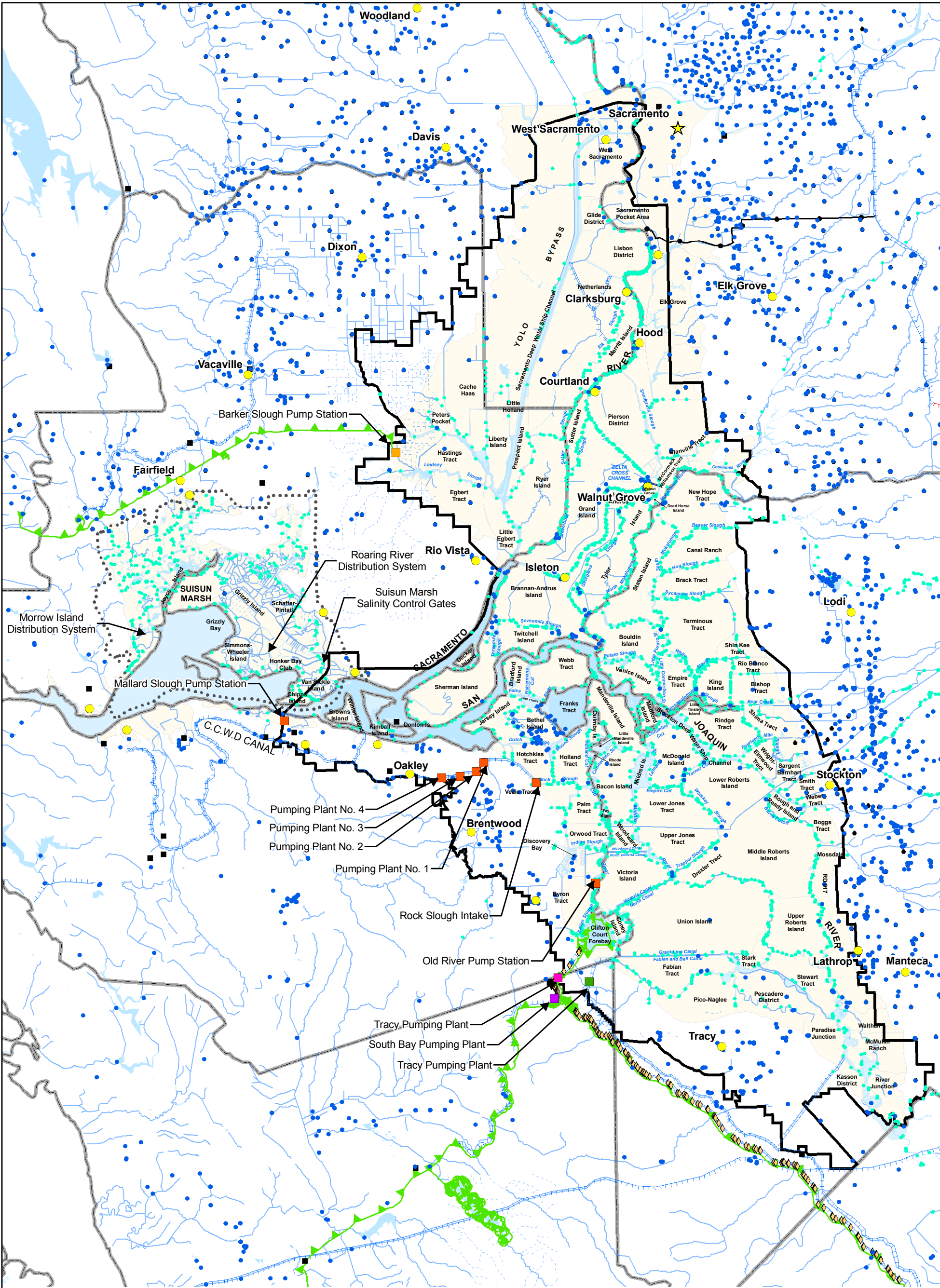
CA Water

CA Counties

Legal Delta

Suisun Marsh





Legend

- | | | | | |
|----------------------------------|-------------------------------------|--|---|-----------------------|
| ● Points of Diversion | ■ Barker Slough Pumping Plant | Mokelumne Aqueduct | ▲ State Water Project Waterways | ■ Delta Cross Channel |
| ● Water Use Wells | ■ CCWD Pumping Plants | — Under Ground | ● Freeport Pipe Route Preferred | ■ CA Water |
| ■ Public Water Supply | ■ Harvey O. Banks DWR Pumping Plant | — Above Ground | — Intermittent canal, ditch, aqueduct, stream, river, or wash | ■ CA Counties |
| ◆ State Water Project Facilities | ■ Tracy Pumping Plant | — Canals | — Perennial canal, ditch, or aqueduct; stream, river; reservoir | ■ Legal Delta |
| ⊕ Delta Cross Channel Gate | ■ South Bay Pumping Plant | — Folsom South Canal Preferred Alignment | | ■ Suisun Marsh |

0 5 10 Miles

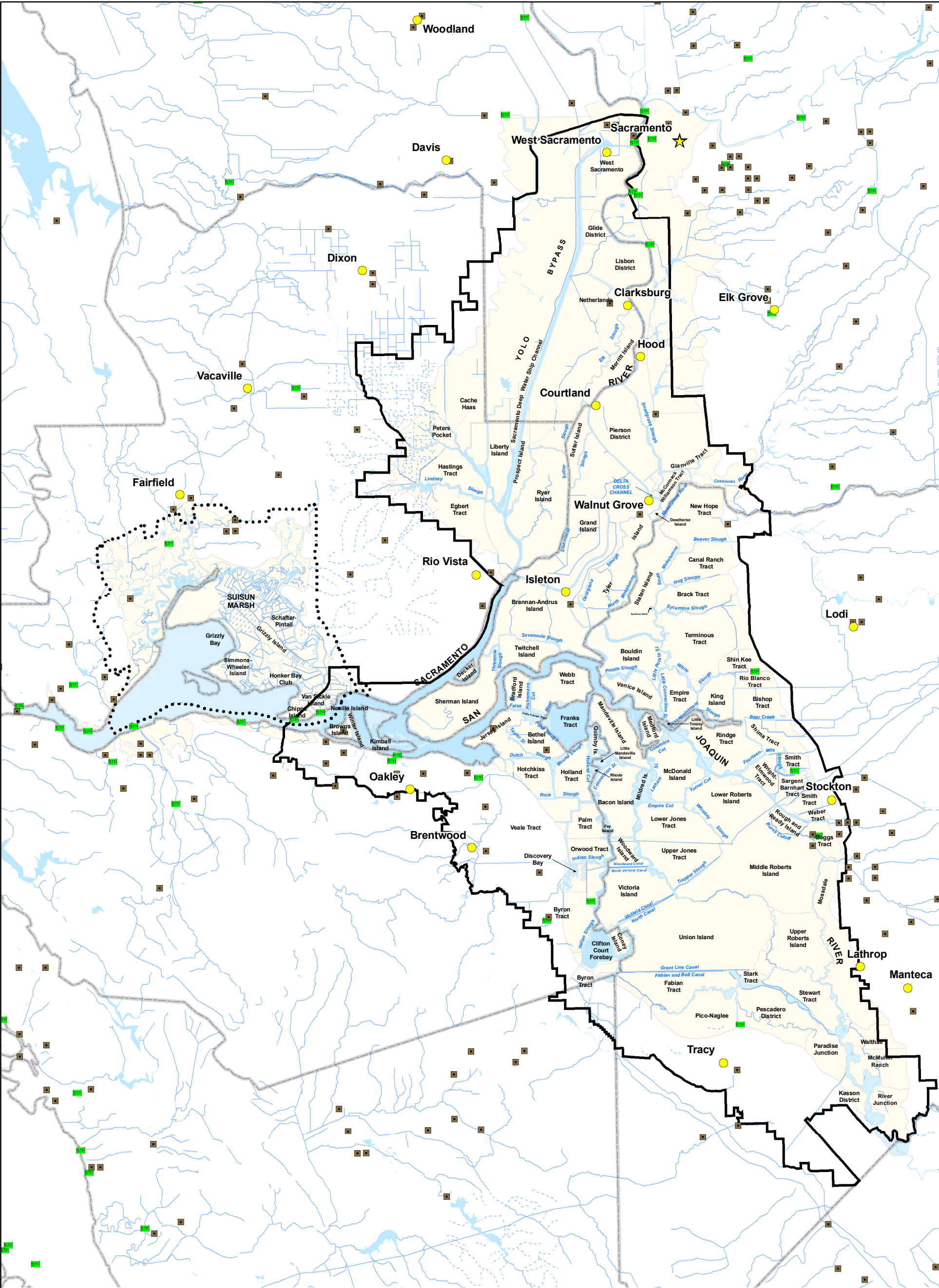


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DRMS
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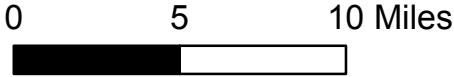
Water Wells, Canals &
Mokelumne Aqueduct

Figure
2-6



Legend

- Solid Waste Facilities
- Sewage Treatment Plant
- Intermittent canal, ditch, aqueduct, stream, river, or wash
- Perennial canal, ditch, or aqueduct; stream, river; reservoir
- CA Water
- CA Counties
- Legal Delta
- Suisun Marsh

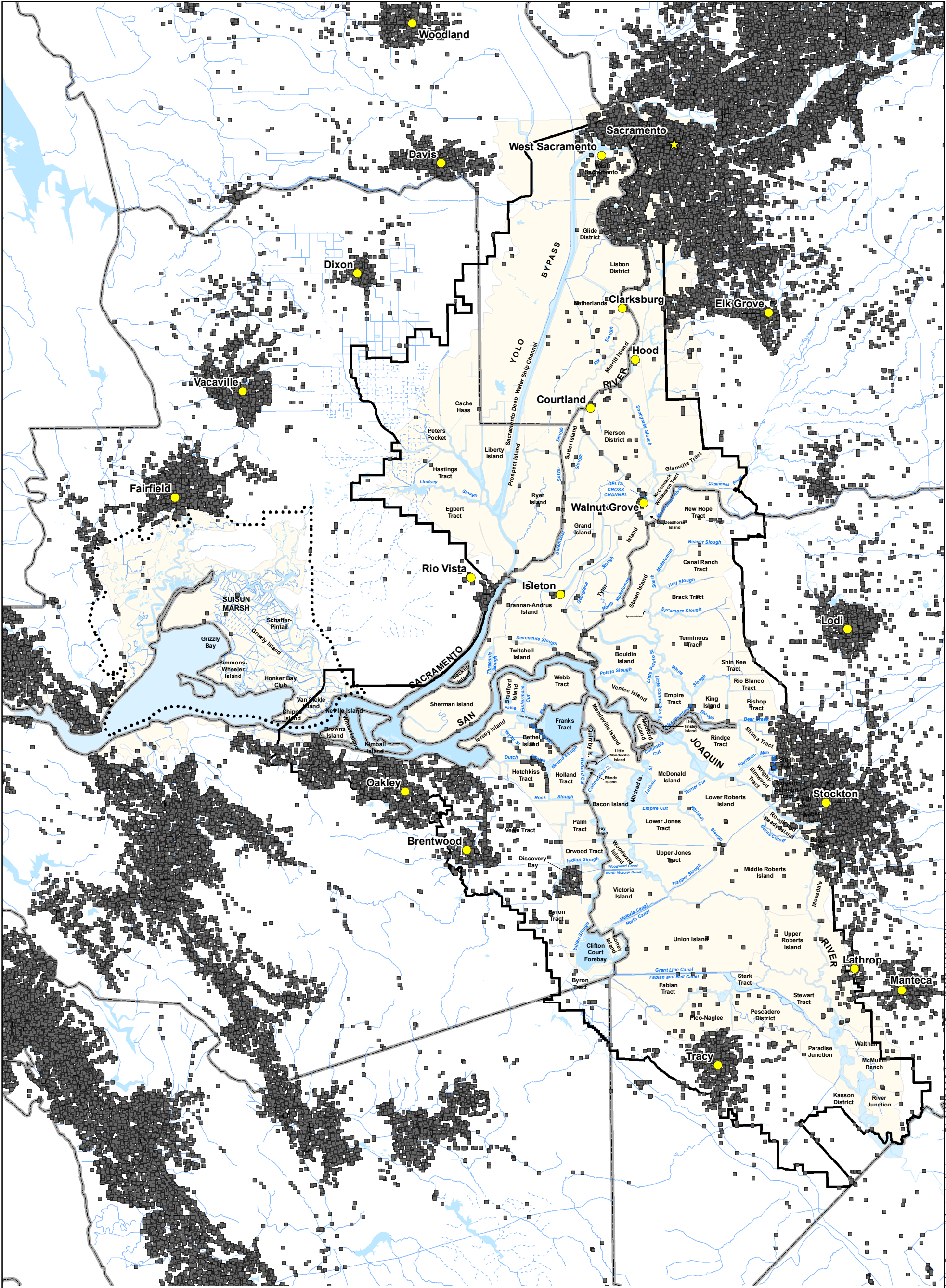


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Solid Waste Facilities &
Sewage Treatment Plants

Figure
2-8



Legend

- Business

 Intermittent canal, ditch, aqueduct, stream, river, or wash

—

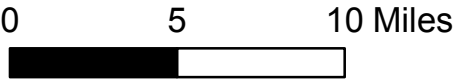
 Perennial canal, ditch, or aqueduct; stream, river; reservoir

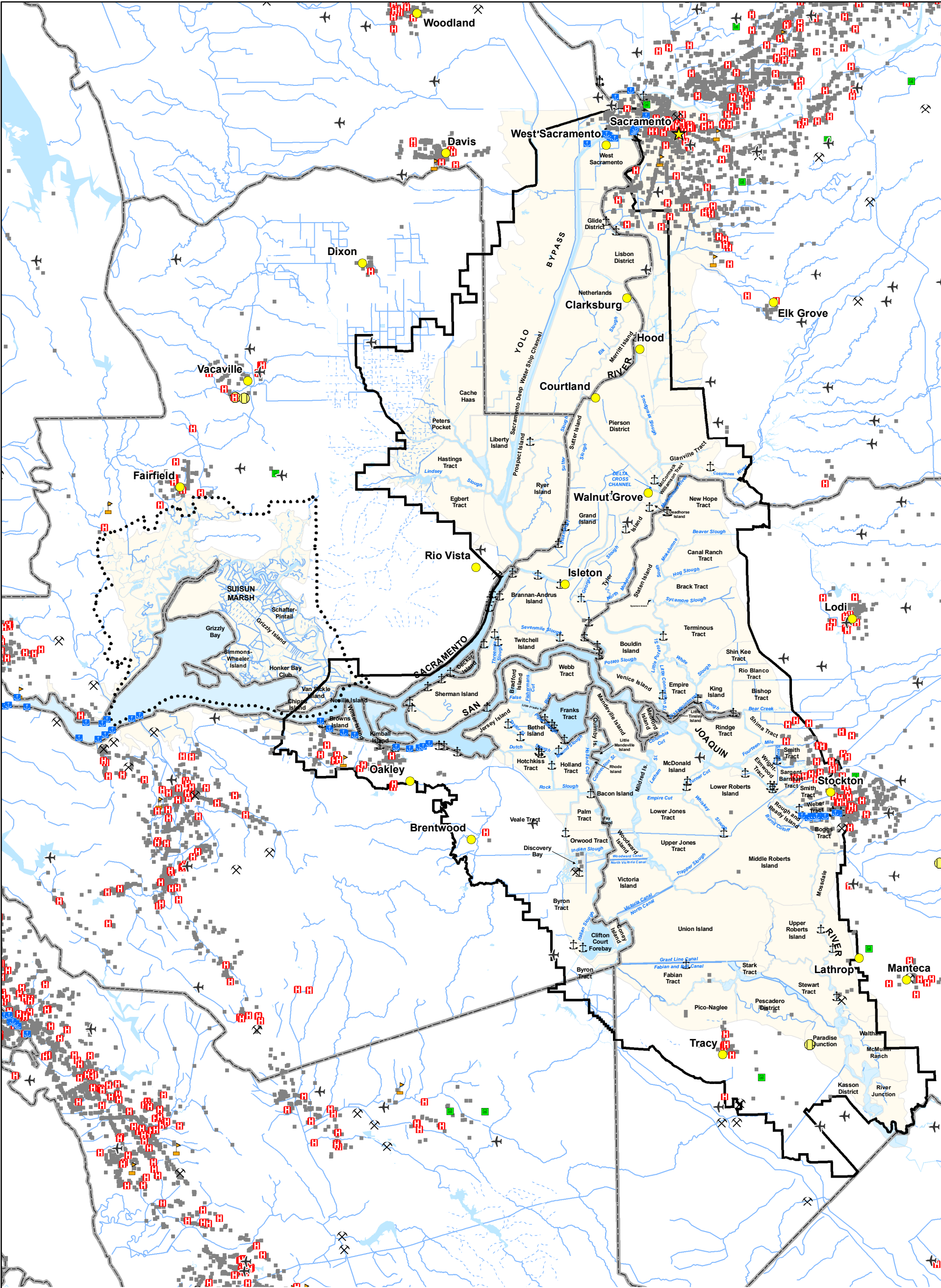
■

 CA Water
- CA Counties

Legal Delta

Suisun Marsh





Legend

- Higher Education

Boatlaunch

Prison

Superfund Sites
- Licensed Healthcare Facilities

BLM Quarry and Mining Operations

Airports

buildings

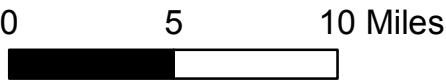
port
- Intermittent canal, ditch, aqueduct, stream, river, or wash

Perennial canal, ditch, or aqueduct; stream, river; reservoir

CA Water
- CA Counties

Legal Delta

Suisun Marsh

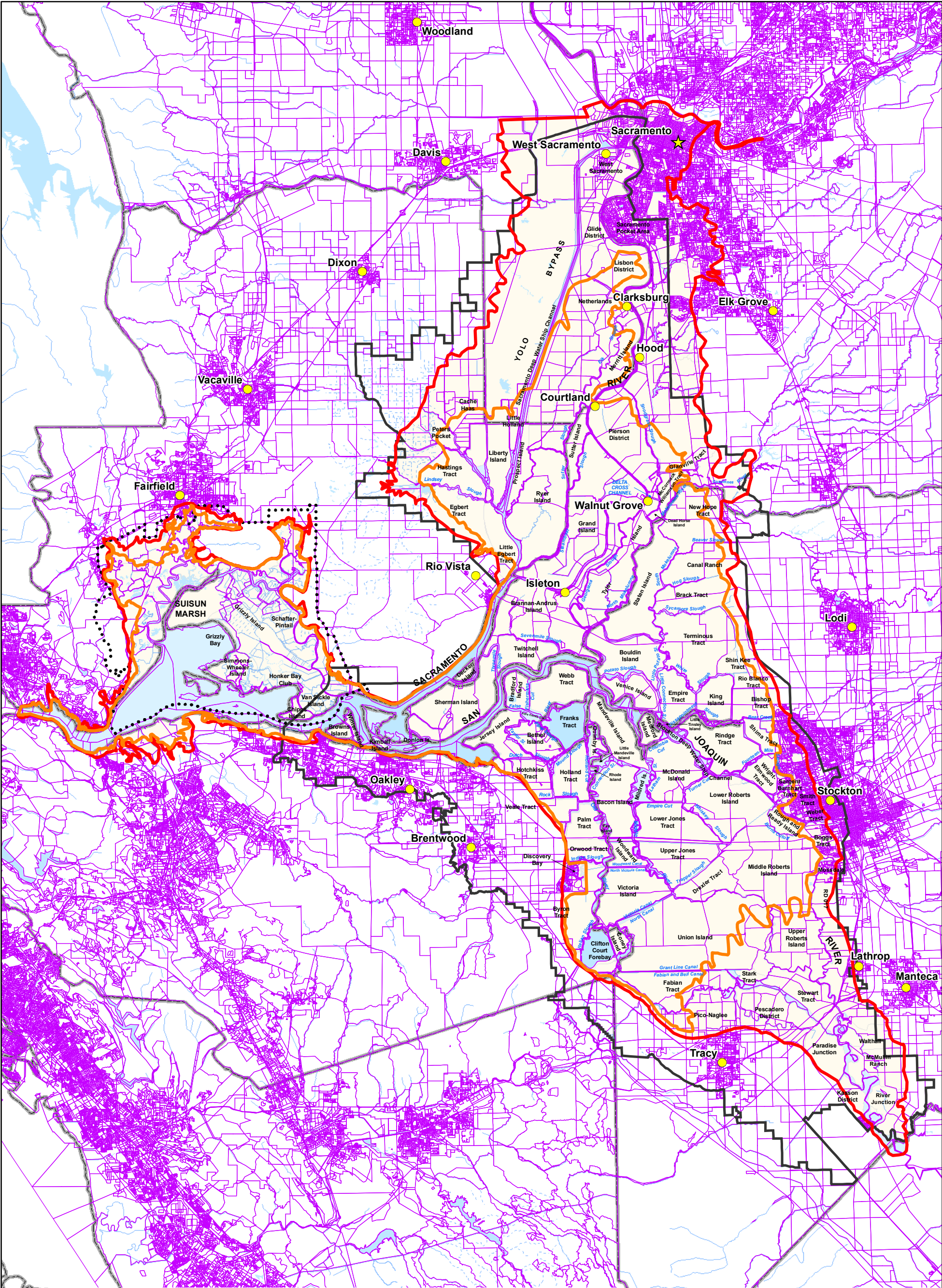


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Miscellaneous Data

Figure 2-10



Legend

- | | | |
|------------------------------|---|--------------|
| U.S. Census Block Boundary | CA Water | CA Counties |
| MHHW Boundary | Intermittent canal, ditch, aqueduct, stream, river, or wash | Legal Delta |
| 100-Year Floodplain Boundary | Perennial canal, ditch, or aqueduct; stream, river; reservoir | Suisun Marsh |

0 5 10 Miles



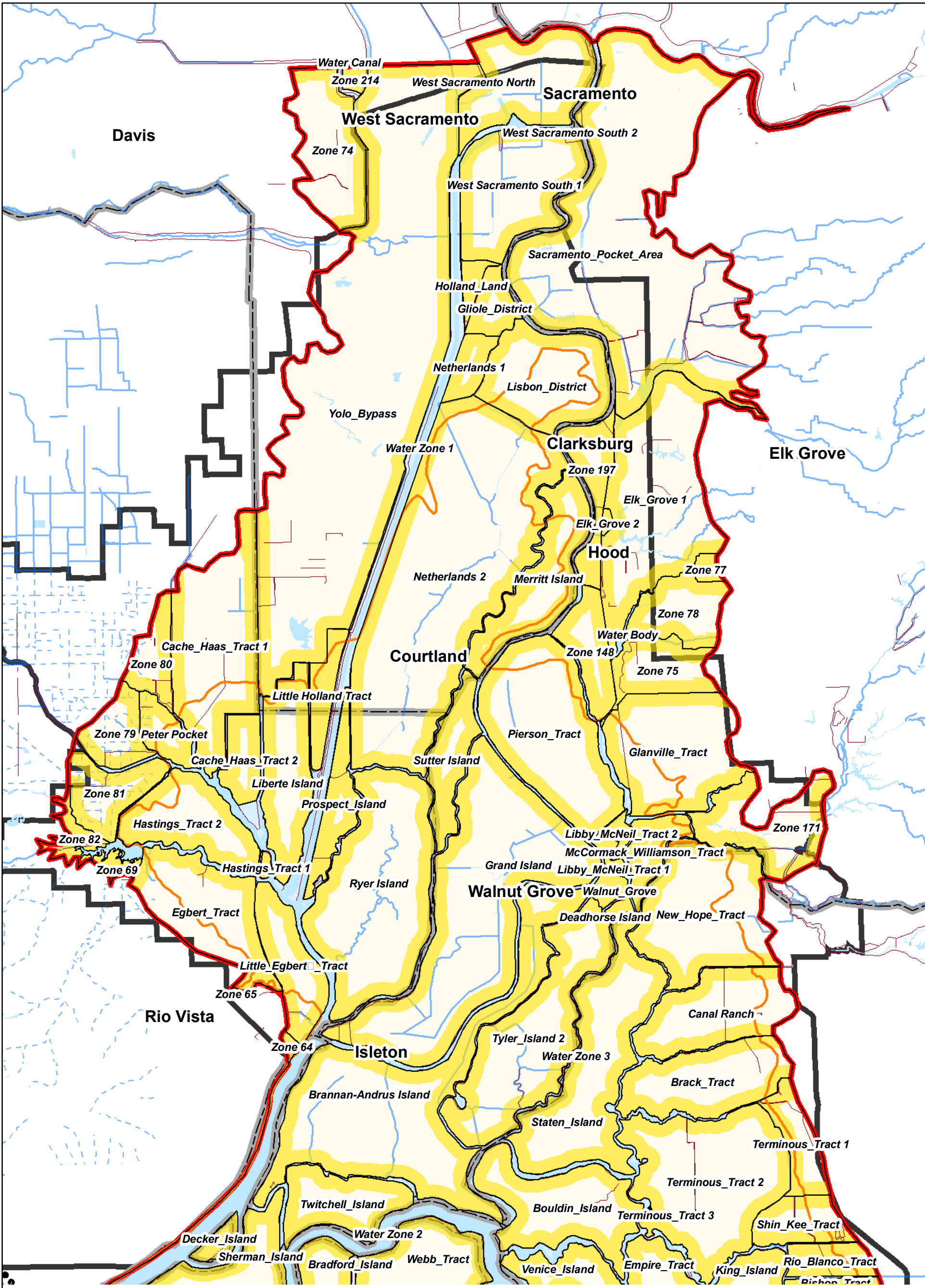
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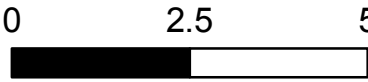
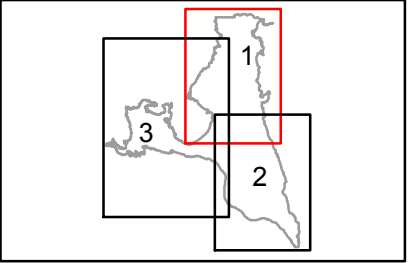
Census Blocks

Figure
3-1



Legend

- Scour Zones
- Levees
- MHHW Boundary
- 100-Year Floodplain Boundary
- Intermittent canal, ditch, aqueduct, stream, river, or wash
- Perennial canal, ditch, or aqueduct; stream, river; reservoir
- CA Water
- CA Counties
- Legal Delta
- Suisun Marsh

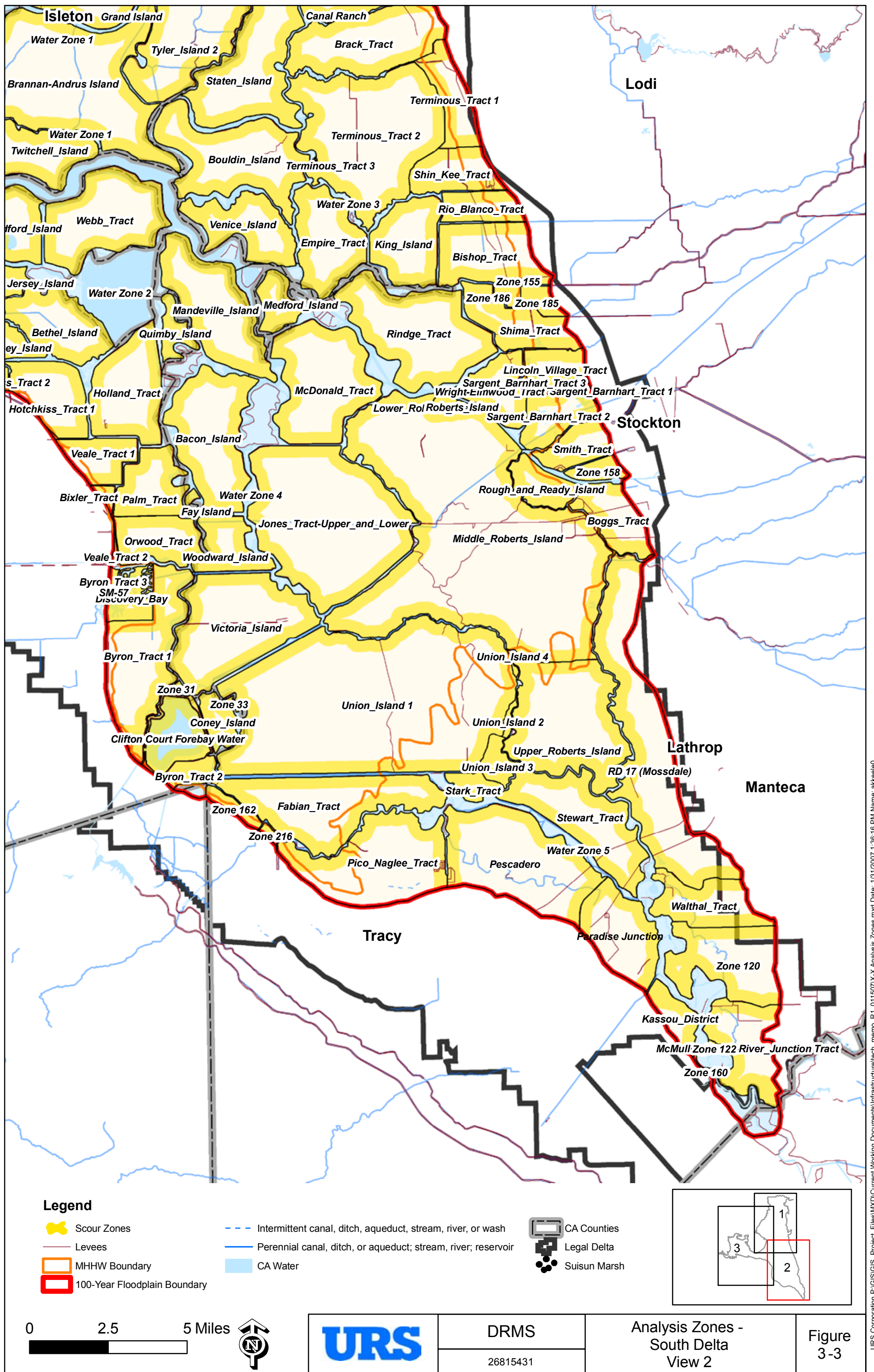


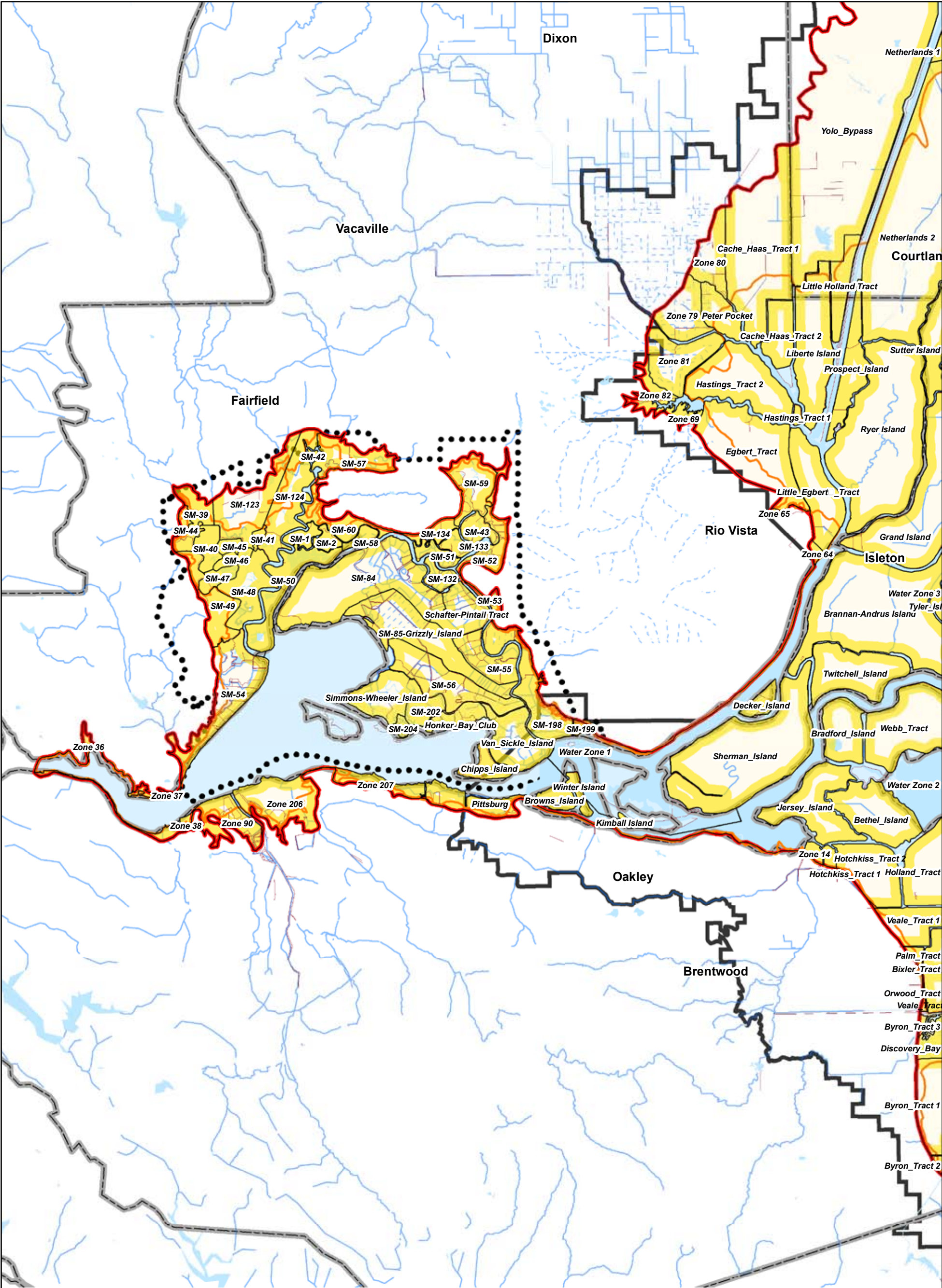
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



Analysis Zones -
North Delta
View 1

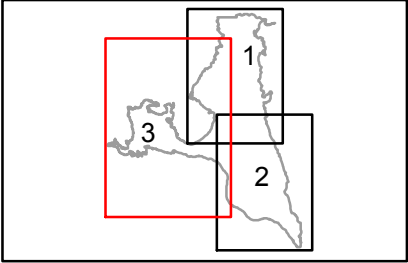
Figure
3-2





Legend

-  Scour Zones
-  Levees
-  MHHW Boundary
-  100-Year Floodplain Boundary
-  Intermittent canal, ditch, aqueduct, stream, river, or wash
-  Perennial canal, ditch, or aqueduct; stream, river; reservoir
-  CA Water
-  CA Counties
-  Legal Delta
-  Suisun Marsh



0 2.5 5 Miles



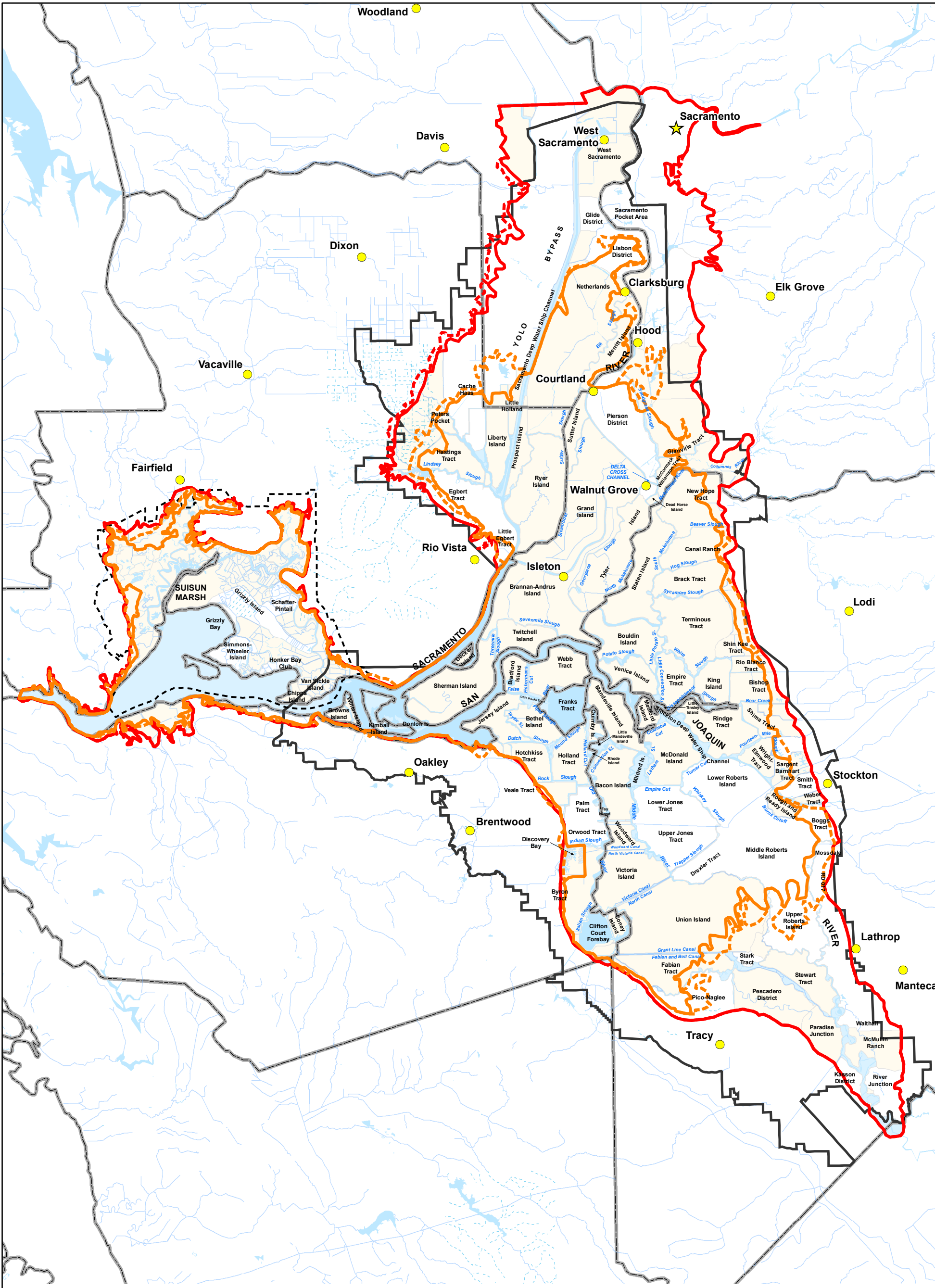
URS

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Analysis Zones -
Suisun Marsh
View 3

Figure
3-4



Legend

- | | | | | | |
|--|-------------------------------|--|---|--|--------------|
| | MHHW Boundary (Current) | | CA Water | | CA Counties |
| | MHHW (2050) | | Intermittent canal, ditch, aqueduct, stream, river, or wash | | Legal Delta |
| | 100-Year Floodplain (Current) | | Perennial canal, ditch, or aqueduct; stream, river; Reservoir | | Suisun Marsh |
| | 100-Year Floodplain (2050) | | | | |

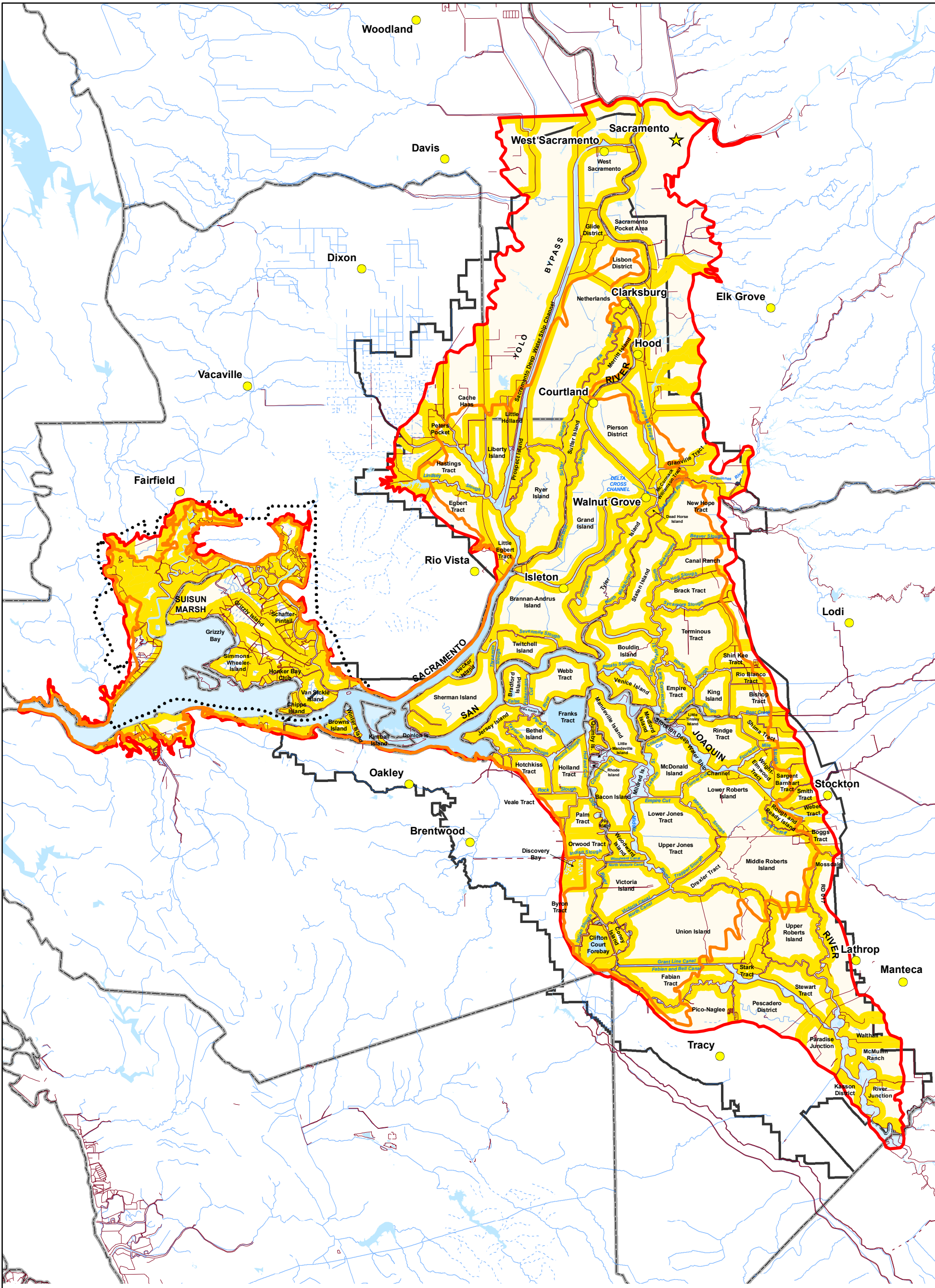
0 5 10 Miles



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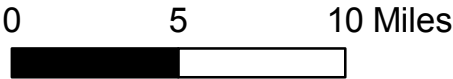
MHHW and 100-Year
Flood Boundaries

Figure
4-1



Legend

- Scour Zones
- Levees
- MHHW Boundary
- 100-Year Floodplain Boundary
- Intermittent canal, ditch, aqueduct, stream, river, or wash
- Perennial canal, ditch, or aqueduct; stream, river; reservoir
- CA Water
- CA Counties
- Legal Delta
- Suisun Marsh

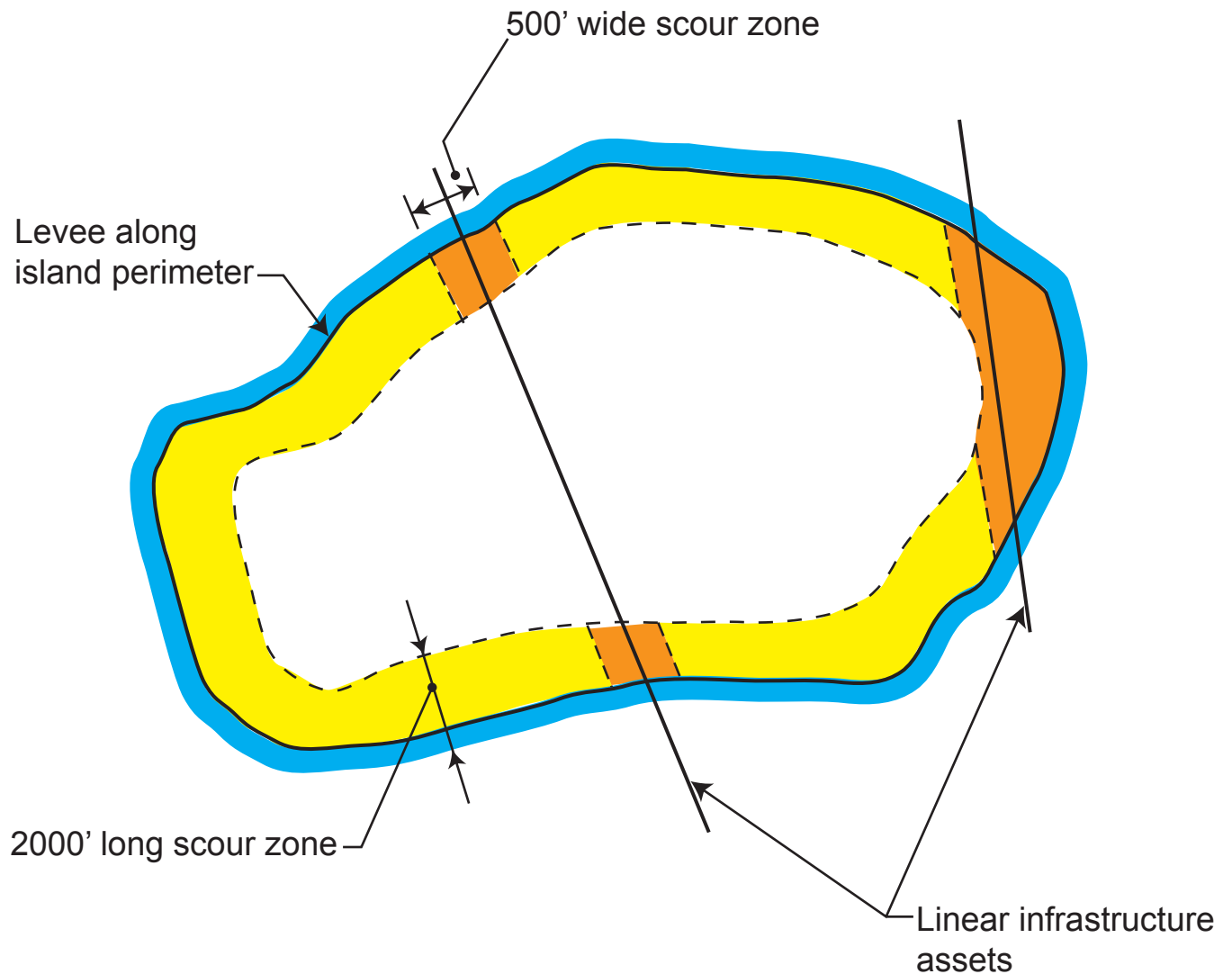


DRMS

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Scour Zones

Figure 4-2



Not to scale

Legend:

- 2000' long scour zone around island perimeter
- Zone of scour influence on linear infrastructure

Appendix A

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

Appendix A presents the following information:

1. Meeting with Major Delta Asset Owners – Invitation
2. Meeting with Major Delta Asset Owners – Invitation List
3. Meeting with Major Delta Asset Owners – Meeting Summary
4. Information Request Table (Questionnaire)

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

**DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS**

INVITATION

Date: October 2, 2006
Time: 9:00 AM – 1:30 PM
(Lunch provided)
Location: URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612

Under Assembly Bill (AB) 1200, California Department of Water Resources (DWR) and Department of Fish and Game (DFG) are required to evaluate the potential impacts on water supplies from the Delta and Suisun Marsh resulting from subsidence, earthquakes, floods, changes in precipitation, temperature, and ocean levels, and a combination of those impacts. The Delta Risk Management Strategy (DRMS) will assess major risks to the Delta resources from floods, seepage, subsidence, and earthquakes. It would also evaluate the state-wide consequences, and develop recommendations to manage these risks.

A large amount of infrastructure is located within the Delta. Some of the infrastructure crosses the Delta to other parts of California and provides vital resources such as water, gas, power, communications, shipping, and railroad freight transportation. Levee failure would cause direct physical damage to this infrastructure and could result in increased costs, lost sales, and environmental damages. Disruption of these In-Delta resources due to levee failure has the potential to cause extreme economic losses to the state and nation as a whole.

As part of the DRMS Project study, URS Corporation with Jack R. Benjamin & Associates have been retained by DWR to evaluate (1) the likelihood of damage to Delta infrastructure assets due to levee failure, (2) the cost of repairs to and restoration of the damaged infrastructure, (3) the estimated time required to make the repairs, and (4) economic costs caused by the disruption of services provided by the infrastructure. The results of the work covered under this part of the DRMS study will be used to estimate net revenue losses to various businesses, utilities, and transportation entities.

The purpose of this meeting is to brief major commercial and public entity asset owners on the DRMS effort and to elicit support/guidance and input to evaluate potential impacts to Delta infrastructure assets. The meeting agenda and background on the DRMS Project are attached.

We hope you will be able to attend this meeting. Please contact Mr. Michael Forrest, Senior Project Manager with URS, to indicate your attendance at the meeting:

Telephone: (510) 874-3012
Fax: (510) 874-3268
e-mail: michael_forrest@urscorp.com

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

**DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS**

October 2, 2006, 9:00 AM – 1:30 PM

**URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612
Agenda**

- 9:00 – 9:15 Welcome and Introduction
- 9:15 – 9:30 Purpose of Meeting
- 9:30 – 10:00 Briefing on the Delta Risk Management Strategy Study
- Objectives
 - Schedule
- 10:00 – 10:30 Overview of Infrastructure Assets in the Delta and Their Location in the Projected Floodplain
- 10:30 – 10:45 Break
- 10:45 – 1:15 Information Requested of Delta Infrastructure Asset Owners
- Asset definition/description
 - Historical cost of repairs to and restoration of damaged infrastructure
 - Time required to make the repairs
 - Estimated cost increases and revenue losses
- (12:00 – 12:30 Lunch will be provided)
- 1:15 – 1:30 Conclusions

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

**DELTA RISK MANAGEMENT STRATEGY
SUMMARY**

There are approximately 1,115 miles of levees protecting 700,000 acres of lowland in the Sacramento-San Joaquin Delta. In the Suisun Marsh, there are approximately 230 miles of levees protecting over 50,000 acres of marsh land. A map of the Delta and Suisun Marsh is shown on the attached Figure 1.

During the last century, there have been 162 Delta levee failures leading to island inundations. In many cases, the flooding of the islands has been extremely costly to both local residents and farmers, and to the State as a whole. Levee failures in the Suisun Marsh have also occurred with significant impacts to local and statewide interests. In February 1998, 11 exterior levee breaches in the Suisun Marsh resulted in the inundation of over 22,000 acres and threatened both the State Water Project (SWP) and Central Valley Project (CVP) facilities.

California has an immense interest in maintaining many of the Delta and Suisun Marsh levees, in part because the Delta is a source of drinking water for about two out of every three Californians. In addition, there are important critical environmental, agricultural, and recreational benefits in the region. There are also extensive infrastructure and capital investments in the Delta, ranging from houses, businesses, and towns to State highways, rail lines, natural gas fields, gas and fuel pipelines, and drinking water pipelines (e.g., Mokelumne Aqueduct) and two deepwater ports.

The 2000 CALFED Record of Decision presented its Preferred Program Alternative that described actions, studies, and conditional decisions to help fix the Delta. Included in the Preferred Program Alternative for a Stage 1 implementation was the completion of a Delta Risk Management Strategy (DRMS) that would assess major risks to the Delta resources from floods, seepage, subsidence, and earthquakes. It would also evaluate the consequences, and develop recommendations to manage the risk.

The DRMS Project is an outgrowth of the risk management program element described in the Record of Decision. It is intended to accomplish the goals originally set forth in the Record of Decision for the risk management strategy, and to provide a set of alternative risk reduction plans that would be considered in subsequent decision/implementation phases. Risk reduction measures that would be common to all alternative plans would be recommended for immediate implementation.

The DRMS Project is being jointly conducted by the California Department of Water Resources and the United States Army Corps of Engineers (USACE) in conjunction with the California Department of Fish and Game (DFG). Under the Record of Decision, the DWR and USACE are the implementing agencies for the Levee program. Under the California Bay Delta Authority Act of 2003, DWR, DFG, and the USACE became the implementing agencies for the Levee Program. All three CALFED agencies coordinate their efforts with the California Bay Delta Authority. The CBDA is an oversight and coordination agency that will be working with the DWR, DFG, and the USACE to ensure that the Delta Risk Management Strategy is conducted in such a way that meets the CALFED Program objectives.

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

The goals and objectives of the DRMS Project are summarized below:

- Evaluate the risk and consequences to the State and to the Delta, including Suisun Marsh, associated with the failure of Delta levees and other assets considering their exposure to all hazards (seismic, flood, subsidence, seepage, climate change, etc.) under present as well as foreseeable future conditions. The evaluation will assess the total risk as well as a deaggregation of the risk for individual islands.
- Propose risk criterion for consideration of alternative risk management strategies and for use in management of the Delta and the implementation of risk informed policies.
- Develop a Delta Risk Management Strategy, including a prioritized list of actions to reduce and manage the risks or consequences associated with Delta levee failures.

Assembly Bill (AB) 1200 requires that DWR and DFG evaluate the potential impacts on water supplies from the Delta resulting from subsidence, earthquakes, floods, changes in precipitation, temperature, and ocean levels, and a combination of those impacts. AB 1200 also provides the following directives:

- DWR and DFG are to evaluate and comparatively rate the options available for advancing certain interests that relate to the Delta; and
- DWR and DFG are required to submit their written findings to the Legislature and Governor not later than January 1, 2008.

Appendix A

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

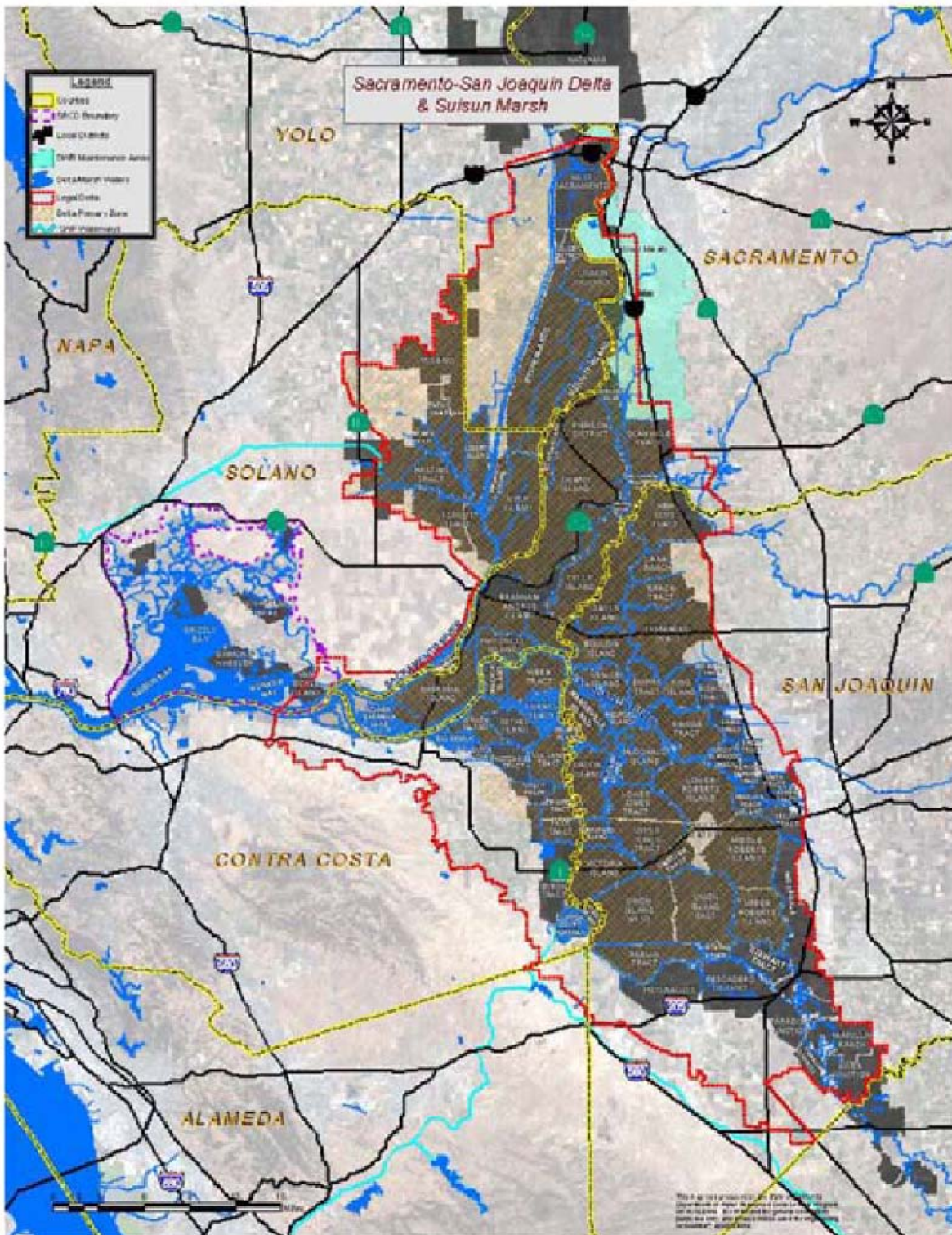


Figure 1 Map of the Delta and Suisun Marsh

Appendix A

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

MEETING WITH MAJOR DELTA ASSET OWNERS Invitee List - Infrastructure/Asset Owners

Agency	Name	E-mail Address	Telephone No.	RSVP – Attend
EBMUD	Randy Kanouse, Special Assistant to Gen. Mgr.	rkanouse@ebmud.com fax: (510) 287-0555 - Marie	(510) 287-0440	*
PG&E	Ben Morris	bem8@pge.com	(415) 973-7687	
	Richard Moss	rhm9@pge.com	(415) 973-6341	
	Geoff Bellenger	gjb2@pge.com	(415) 973-8415	
	Carl Orr	cdo1@pge.com	(415) 973-2920	
	Waymon Pon, Manager, Gas System Operations	wwp1@pge.com	(415) 973-3890	Yes
	Mark Esguerra, Supervising Engr., Electric Transmission Planning	Pme8@pge.com	(415) 973-4380	Yes
Western Area Power Administration	Tom Boyko	boyko@wapa.gov see@wapa.gov - Marie	(916) 353-4416	*
BNSF Railroad	John Fleming	john.fleming@bnsf.com	(209) 460-6175	
	Russ Shelton	russ.shelton@bnsf.com	(323) 267-4106 (LA)	
	Kevin Shaw [Hill, Farrer, & Burrill, LLP (represents BNSF)]		(213) 621-0821	Yes
Union Pacific Railroad	Patrick Kerr	pakerr@up.com		
	Rick Gooch	rlgooch@up.com		
Port of Stockton	Richard Aschieris, Port Director	raschieris@stocktonport.com	(209) 946-0246	No
	J. Kaspar, Deputy Port Director	jkaspar@stocktonport.com		No
Port of Sacramento	Mike Luken, Port Manager	mikel@cityofwestsacramento.org	(916) 371-8000	
	Tom Scheeler, Port Engineer	toms@cityofwestsacramento.org	(916) 617-4880	Yes
Caltrans	Kome Ajise, Director, District 10	kome_ajise@dot.ca.gov	(209) 948-7943	Yes

Appendix A

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

Agency	Name	E-mail Address	Telephone No.	RSVP – Attend
	Doug Lange, Contract Manager, District 3	doug_lange@dot.ca.gov	(530) 741-4465	*
	Joe Caputo, District 3	joe.caputo@dot.ca.gov		*
	James Richards	james_richards@dot.ca.gov	(510) 286-5907?	
Kinder Morgan	D.R. Quinn	1100 Town & Country Rd. Orange, CA 92868 (sent by mail; e-mail N/A)	(714) 560-4940	* (V-M)
AT&T	Ken Lear, Director, Design & Construction, West Region	kl2759@att.com	(925) 823-1070	* (V-M)
San Joaquin Council of Governments	Dana Cowell, Deputy Director	dcowell@sjcog.org	(209) 468-3913	
	Thomas Flinn, Public Works Director	tflinn@sjgov.org	(209) 468-3000	Yes? (tentative)
	Steve Winkler, Deputy Director/Ops			Yes? (tentative)
San Joaquin County	Roger Churchwell, Sr. Civil Engineer	rchurchwell@sjgov.org	(209) 953-7617	Yes
SMUD	Vicken Kasarjian	nsmith2@smud.org (for V.K.)	(916) 452-3211	No
CCWD	Marguerite Naillon	mnaillon@ccwater.com		Yes
	Leah Orloff, Sr. Water Resources Specialist	lorloff@ccwater.com		Yes
	Greg Gartrell, Assist Gen Mgr	ggartrell@ccwater.com		No
Nomellini, Grilli, McDaniels	Dante Nomellini	ngmplcs@pacbell.net fax : (209) 465-3956 - Jeanne	(209) 465-5883	*

* Followed by phone call and re-sent Invitation on 9/27/06. V-M = voicemail.

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

**DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS**

October 2, 2006, 9:00 AM – 1:30 PM

Meeting Summary

Meeting Attendees

See attached list of attendees.

Purpose of Meeting

- Brief major commercial and public entity asset owners on the DRMS effort.
- Elicit support/guidance on input to evaluate potential impacts to Delta infrastructure assets.

The meeting agenda is attached.

Summary of Discussions

- There was a question about what levees does the Corps of Engineers have authorization to study/work on. The answer was that they should be able to study all of them, if they are Corps levees or not.
- Wendy asked everyone to figure out where their assets fell within the inundation zones (inundation described by the mean higher high tide and 100-year flood levels) shown on the GIS maps, and asked if assets would be repaired before the flooding receded or right away. Further, she asked if the assets could withstand long-term flooding (4 years), and if not, would repairs have to wait until the flooding receded. She asked what sorts of repairs would be achievable and at what cost. [The 100-year flood level may not need to be considered for infrastructure damage assessments due to its limited duration; to be determined.]
- There was discussion about what levels of floods/inundation the participants should focus on. Are we looking at 200-year or 500-year floods? The answer was that we're looking at all levels; this will be clarified as we proceed in the studies. [Such flood levels will be considered for levee fragility considerations, but do not appear to be applicable to infrastructure damage assessments].
- We will be using HAZUS and our own modeling to calculate damage. HAZUS is okay for calculating damage to residences, not infrastructure. Steve from DWR is working on updating parcel level information, which will include crop information, for use in these models.
- There was a question about how climate change will be examined on top of sea level rise. Sea level rise is a factor of both thermal expansion and ice melt. Sea level rise is currently projected to rise between 6 inches and 2 feet over the next 100 years. Climate change can include changing weather patterns and other factors outside sea level change. Inundation maps for 50, 100, and 200 years in future will be created once the Climate Change group finishes their modeling.
- Wendy asked what impacts might customers/others outside the Delta be subjected to if infrastructure within the Delta was damaged.
- Restoration projects may restore an average of 500 acres/year, but there is an ultimate cap to the number of acres that will be restored.

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

- Wayman Pon (PG&E) asked if he should focus on transmission or distribution. The answer was both, or whatever made the most sense to consider damage, cost, or impact on users. He thought that transmission systems would be his main focus.
 - The gas pipelines are buried, 42-inch diameter pipes. A new pipeline is to be built; it will be 50 feet deep. [When will it be built, and where?]
- If a transmission line tower were to fail, it could cause multiple tower failures. There is redundancy in electric transmission lines. However, all of the redundant lines go through the Delta, and some of them in common rights-of-way.
- A question was asked about scour zone. This zone is basically within 2,000 feet of the levees; this is the length of the scour zone. Scour depths are estimated to be as deep as 50 feet. The scour zone is deepest in the middle and tapers off at both the entrance and exit ends. Any asset with a foundation that extends well below 50 feet (piles) or buried deeper than 50 feet within this zone would be okay in the event of a flood/breach. Any asset in the zone founded above 50 feet would probably fail.
- Roger Mann had a question about natural gas production in general. Natural gas production has been declining over time. That produced in the Delta represents less than 10% of total state usage. There is a major underground storage facility for NG that had been flooded in the past, but still functioned. It is believed that the facility would be okay in the event of a breach/flood.
- Said asked if there was redundancy in the electrical system. The answer was yes, but that does not solve all problems if the flood is big enough that it knocks out all systems or if it knocks out enough primary systems that the redundant systems cannot handle the impact.
- Roger Mann asked if a flood of significant duration could impact utilities enough to negatively impact service. The answer from PG&E was not necessarily; it would cost more (either to the company or to other customers).
 - Gas lines were developed for 30-90 year extreme (demand) events, such as winter storms. If a loss of a pipeline coincided with an extreme event (where demand peaks), there may be impacts such as increased prices and gas shortages.
- There was a discussion about the sensitive nature of some of the infrastructure/utility data. The consensus seemed to be that we could work around any of those issues. Tom Bailly suggested consulting with the State OHS, but others thought that that would not be necessary.
- Tom Scheeler, from the Port of Sacramento, discussed potential of levee breaks near the Port of Sacramento. If the west levee broke but the east levee did not, West Sacramento could flood. If the levees broke on the eastern side, or just outside the Delta boundary, Sacramento could flood. Even though we are tasked to consider risk within the Delta boundary, it may be worthwhile to consider similar impacts of breaches outside the Delta, but within the same levee system. [Scope issue.]
- Lea Orloff and Marguerite Naillon, Contra Costa Water District, discussed impacts to pump stations during a flood. Depending on the depth of the flood, most stations are built to withstand impacts. CCWD needs to know the flood levels. The levee protection has been built to modern standards. They are more concerned about water quality; if the water

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

becomes too salty, 500,000 people would lose water service. Marguerite recommended that we contact Chris Nuedeck about the levee protection system of CCWD assets.

- Roger Churchwell, San Joaquin County Public Works, was concerned about studying global warming impacts in such a small, specific area. Global warming has regional, state, national, etc. impacts. It is thought that the impacts to the Delta from global warming may help policymakers prioritize Delta actions. It may not be worth spending a lot of money to maintain specific Delta benefits if those benefits are destined to disappear anyway.
- Mike will send the Information Request Table by e-mail to the asset owner meeting attendees and to the asset owners that were invited but did not attend the meeting. He will also send the DRMS website link to the asset owners where they will be able to access the meeting PowerPoint presentation. [Done.]
- The asset owners were asked to provide points of contact for URS.
- We agreed that there will be a follow-up meeting with the asset owners in mid-November, after we have some information on potential cost of infrastructure damage.

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

**DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS**

October 2, 2006, 9:00 AM – 1:30 PM

**URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612
Agenda**

- 9:00 – 9:15 Welcome and Introduction
- 9:15 – 9:30 Purpose of Meeting
- 9:30 – 10:00 Briefing on the Delta Risk Management Strategy Study
- Objectives
 - Schedule
- 10:00 – 10:30 Overview of Infrastructure Assets in the Delta and Their Location in the Projected Floodplain
- 10:30 – 10:45 Break
- 10:45 – 1:15 Information Requested of Delta Infrastructure Asset Owners
- Asset definition/description
 - Historical cost of repairs to and restoration of damaged infrastructure
 - Time required to make the repairs
 - Estimated cost increases and revenue losses
- (12:00 – 12:30 Lunch will be provided)
- 1:15 – 1:30 Conclusions

Appendix A

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

DELTA RISK MANAGEMENT STRATEGY MEETING WITH MAJOR DELTA ASSET OWNERS

October 2, 2006, 9:00 AM – 1:30 PM

List of Attendees

Name	Organization	Telephone Number	E-mail
Ralph Svetich	DWR	916-651-7020	rsvetich@water.ca.gov
Steve Cowdin	DWR	916-653-8166	scowdin@water.ca.gov
Joel Dudas	DWR	916-651-7002	jdudas@water.ca.gov
Mike Forrest	URS	510-874-3012	Michael_forrest@urscorp.com
Said Salah-Mars	URS	510-874-3051	Said_salah-mars@urscorp.com
Tom Baily	URS	510-874-3166	Thomas_baily@urscorp.com
Ram Kulkarni	URS	510-874-3045	Ram_Kulkarni@urscorp.com
Amy Keeley	URS	510-874-3259	Amy_Keeley@urscorp.com
Mike Citro	URS	510-874-1739	Mike_citro@urscorp.com
Mark Mazzola	URS	510-874-3028	Mark_mazzola@urscorp.com
Wendy Illingworth	Economic Insights	831-427-2163	wendy@econinsights.com
Rick Rhoads	Moffatt & Nichol	925-944-5411	rrhoads@moffittnichol.com
Roger Mann	Rmecon	530-756-1884	rmecon@sbcglobal.net
Bob Twiss	Consultant	415-454-5610	twiss@rtasc.com
Kevin Shaw	BNSF R.R.	213-621-0821	kshaw@hillfarrer.com
Leah Orloff	CCWD	925-688-8083	lorloff@ccwater.com
Marguerite Naillon	CCWD	925-688-8018	mnaillon@ccwater.com
Mark Esguerra	PG&E	415-973-4380	Pme8@pge.com
Wayman Pon	PG&E	415-973-3890	Wwp1@pge.com
Thomas Scheeler	Port of Sacramento	916-617-4882	toms@cityofwestsacramento.org
Roger Churchwell	San Joaquin Co.	209-953-7617	rchurchwell@sjgov.org

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

DELTA RISK MANAGEMENT STRATEGY MEETING WITH MAJOR DELTA ASSET OWNERS INFORMATION REQUEST TABLE

Item No.	Information Request/Question	Information Provided/Response
1	Asset Definition/Description: Are “as-built” drawings available showing basic details and dimensions of the infrastructure?	
	a. Confirmation of the location, number, and physical description (e.g., diameters of pipelines, number of towers, length of other assets).	a.
	b. Information along island perimeters, such as slough cross-sections at pipeline/ bridge crossings.	b.
	c. Information on any flood protection (such as the height of berms around asset, reinforcement of structures). Information on any seismic retrofit; if retrofitted, what was the seismic design criteria?	c.
	d. Type of foundation (e.g., spread footings, piles – range of depths, etc.).	d.
	e. Installation descriptions, such as above or below ground; pipe cover depths in sloughs and across islands.	e.
2	Historical Data:	
	a. <u>Repair Costs</u> : Do you have historical information on events that resulted in damage or failure of infrastructure? If so, what was the date of each event, the extent of the damage/failure, associated costs for repairs, time to complete repairs and the total outage time?	a.
	b. <u>Time for Repairs</u> : What is the expected outage time to make repairs of a failure/damage caused by a levee breach? Would you need to wait for the island to be drained before repairing the infrastructure? If yes, what would you do if flooding was extensive and prolonged? If not, what would be the impact of continued flooding on your repair costs?	b.
	c. <u>Effect on Operations</u> : How did the outage affect your operations? Please provide an estimate of revenue loss and/or increase in operating costs (other than repair costs) for the above outage time.	c.
3	Effect on Customers: What effect did outages have on customers? (e.g., reduced product deliveries, higher prices) How would customers be affected if the outage was more prolonged? What length would the outage have to be to result in more serious effects on customers?	

Invitation To Meeting With Major Delta Asset Owners And Questionnaire

Item No.	Information Request/Question	Information Provided/Response
4	Trends: Do you have any plans to increase or decrease the capacity of your assets in the Delta? What is the expected time frame?	
5	Vulnerability Assessments: Have you performed any assessments, such as asset and business vulnerability assessment associated with events in the Delta (island flooding, seismic, wind events, etc.)? If so, can these studies be made available?	
6	Other Considerations: Is there any other information about your assets in the Delta that you think we should consider for our analysis?	

We appreciate your effort to obtain the requested information. We would appreciate any information that you can provide by October 23, 2006. Please contact me if you have any questions. Thank you:

Michael Forrest, Senior Project Manager
 URS Corporation, 1333 Broadway, Suite 800, Oakland, CA 94612
 Telephone: (510) 874-3012
 Fax: (510) 874-3268
 e-mail: michael_forrest@urscorp.com

Appendix B
Data Provided by Asset Owners

Appendix B presents the following information:

1. Meeting with Major Delta Asset Owners, Information Request Table – EBMUD
2. EBMUD Meeting Notes
3. Meeting with Major Delta Asset Owners, Information Request Table – PG&E (Gas Transmission)
4. PG&E Meeting Notes
5. Meeting with Major Delta Asset Owners, Information Request Table – PG&E (Electric Transmission)
6. Meeting with Major Delta Asset Owners, Information Request Table – CCWD

DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS
INFORMATION REQUEST TABLE - EBMUD

Item No.	Information Request/Question	Information Provided/Response
1	<p>Asset Definition/Description: Are “as-built” drawings available showing basic details and dimensions of the infrastructure?</p> <p>f. Confirmation of the location, number, and physical description (e.g., diameters of pipelines, number of towers, length of other assets).</p>	<p>Yes. Only be available for review on a need to see basis due security concerns related to water supply systems.</p> <p>a. Mokelumne Aqueducts – 3 large diameter pipelines, 14 miles Stockton to Bixler. 4 miles of buried pipelines, 10 miles of elevated pipelines. Three river crossings, San Joaquin River, Middle River, and Old River with two over water segments at Trapper Slough and Werner Cut.</p> <p>Aqueduct #1 constructed in 1929, 65 inch diameter welded steel pipe with riveted joints, coal tar coated inside and out, elevated portions on concrete and wood bents on wood piles, river crossings are 1929 vintage. 41 MGD gravity flow, 67 MGD pumped. .</p> <p>Aqueduct #2 constructed in 1947, 67 inch diameter welded steel pipe with double welded joints, buried portions are concrete coated and cement mortar lined, elevated portions are inorganic zinc coated and cement mortar lined, elevated portions on steel bents and concrete piles. River crossings are 1929 vintage. 54 MGD gravity flow, 87 MGD pumped.</p> <p>Aqueduct #3 constructed 1962, 87 inch diameter welded steel pipe with seismically reinforced welded joints in buried sections and 1962 vintage river crossings, elevated portions are on seismically reinforced steel bents and concrete piles. Buried portions are concrete coated and cement mortar lined. Elevated portions are red lead and aluminum paint coated and cement mortar lined. 105 MGD gravity flow, 152 MGD or 172 MGD pumped.</p> <p>All there pipelines are on a fee owned 100 foot wide right of way, each has an impressed current cathodic protection system. There are also right of way cross drainage systems and an all weather road paralleling the pipelines.</p>

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
1 cont'd.	g. Information along island perimeters, such as slough cross-sections at pipeline/ bridge crossings.	b. Yes. Only be available for review on a need to see basis due security concerns related to water supply systems.
	h. Information on any flood protection (such as the height of berms around asset, reinforcement of structures). Information on any seismic retrofit; if retrofitted, what was the seismic design criteria?	c. Aqueduct #3 is reinforced to MCE criteria. Aqueduct #1 and #2 are designed to the standards of the dates they were installed. Aqueducts are not specifically protected against flooding. Flood protection is provided by Reclamation District 684 Lower Roberts Island, 2038 Lower Jones Tract, 2039 Upper Jones Tract, 2072 Woodward Island and 2024 Orwood-Palm Tract.
	i. Type of foundation (e.g., spread footings, piles – range of depths, etc.).	d. All elevated portions of the aqueducts are on bents and piles. See a. for details. Pile depth data is available.
	j. Installation descriptions, such as above or below ground; pipe cover depths in sloughs and across islands.	e. See a. above. Buried pipe depths are nominally 5 feet.
2	Historical Data: d. <u>Repair Costs</u> : Do you have historical information on events that resulted in damage or failure of infrastructure? If so, what was the date of each event, the extent of the damage/failure, associated costs for repairs, time to complete repairs and the total outage time?	a. Upper Jones Tract flood 2004. Aqueduct coating damage is estimated at \$10 million. Right of way drainage repairs and cleanup cost is about \$500,000. Aqueduct remained in service during flooding and recovery. Coating repairs to take place 2007 and 2008.
	e. <u>Time for Repairs</u> : What is the expected outage time to make repairs of a failure/damage caused by a levee breach? Would you need to wait for the island to be drained before repairing the infrastructure? If yes, what would you do if flooding was extensive and prolonged? If not, what would be the impact of continued flooding on your repair costs?	b. Repair times depend on the extent of damage. 6 month is the maximum outage EBMUD has Aqueduct recovery plans for.
	f. <u>Effect on Operations</u> : How did the outage affect your operations? Please provide an estimate of revenue loss and/or increase in operating costs (other than repair costs) for the above outage time.	c. Aqueduct flows were not interrupted. Increased operating costs are included in damage cost estimates and were primarily for flood fighting support to DWR and San Joaquin County.
3	Effect on Customers: What effect did outages have on customers? (e.g., reduced product deliveries, higher prices) How would customers be affected if the outage was more prolonged? What length would the outage have to be to result in more serious effects on customers?	No direct impacts on customers because water supply was not interrupted. Continued operations during prolonged flooding (without structural damage to the aqueducts) may be possible. Additional protective measures may be necessary during the flood event. Structural damage to one or more aqueduct pipelines causing an extended outage (on the order of 6 months or more) could cause serious effects, including emergency rationing to conserve local supplies. The severity of the outage and ability to access alternate supplies would influence the extent of rationing.

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
3 cont'd		Construction of a 30 mgd Emergency Intertie between the SFPUC and EBMUD systems in Hayward is nearing completion and an Emergency Intertie with CCWD (60-100mgd) near Oakley will be constructed over the next year or so. The availability of alternate supplies would depend on whether other water systems remain operable after a major emergency.
4	Trends: Do you have any plans to increase or decrease the capacity of your assets in the Delta? What is the expected time frame?	There are no current plans to increase or decrease the capacity of EBMUD assets in the delta.
5	Vulnerability Assessments: Have you performed any assessments, such as asset and business vulnerability assessment associated with events in the Delta (island flooding, seismic, wind events, etc.)? If so, can these studies be made available?	Any Vulnerability Assessments completed for security purposes cannot be made available. A probabilistic seismic analysis for the delta portion of the aqueducts was completed for EBMUD's 1993 Water Supply Management Program and is available.
6	Other Considerations: Is there any other information about your assets in the Delta that you think we should consider for our analysis?	The Mokelumne Aqueducts are vital to the health and safety of 1.3 million people in the East Bay. Emergency response planning done as part of the Delta Risk Mgt Strategy should recognize this.

We appreciate your effort to obtain the requested information. We would appreciate any information that you can provide by October 23, 2006. Please contact me if you have any questions. Thank you:

Michael Forrest, Senior Project Manager
 URS Corporation, 1333 Broadway, Suite 800, Oakland, CA 94612
 Telephone: (510) 874-3012
 Fax: (510) 874-3268
 e-mail: michael_forrest@urscorp.com

DRMS PROJECT - DELTA ASSETS

EBMUD Meeting Notes
November 13, 2006, 11:45 - 12:00

Meeting Participants

- EBMUD:
 - Xavier Irias – Director of Engineering
 - Clifford Threlkeld – Manager, Water Supply Division
 - Brian Campbell – (URS point of contact: bcampbel@ebmud.com; tel: 510-287-0680)
- URS:
 - Mike Forrest

Discussion

1. It is assumed that the Mokelumne Aqueduct (M.A.) consists of three pipelines along the entire route where it crosses the Delta.

- Assumption is correct.
- 2. Where is M.A. elevated and where is it buried?*
- Stockton to Whiskey Slough - Buried section.
 - Whiskey Slough to Bixler (just west of Palm-Orwood Tract) – Elevated Section, except at slough crossings at Middle River and Old River.
 - West of Bixler – Buried section.
 - Slough crossings – The M.A. #3 is buried 30 feet below the river bottom. For 250 feet on each side of the pipeline, the M.A. #3 has been encased in backfill, part of which is rock. See Exhibit 2-3, Initial Study and Mitigated Negative Declaration for the Mokelumne Aqueduct Seismic Upgrade Project (March 1996).

3. Depth of piles along elevated M.A., especially within 2000 feet of the island perimeters (scour issue).

- Figure 4-1 of the Final Report, Mokelumne Aqueduct Seismic Upgrade Project, Preliminary Design (August 3, 1995), shows pile embedment lengths for the M.A. EBMUD confirmed that embedment depths shown on Figure 4-1 are typical.

4. Can a breached M.A. be repaired prior to pump out (i.e., repaired underwater)?

- If a M.A. pipeline is breached, it can and would be repaired underwater, prior to island pump out, to restore service. Repairs would include underwater welding. EBMUD is prepared for this event. After island pump out, final repair work would be done. EBMUD has not yet had to repair pipelines underwater. EBMUD was not able to give estimates of cost and time to repair a breached pipeline; the work would be done under time and materials contract.

5. What was length of M.A. needing repairs following the June 2004 Jones Tract failure? Did all three aqueducts need repair?

- Damaged pipelines (but still able to operate), such as at Jones Tract (June 2004), are repaired after island pump out. The repair costs to the three M.A. pipelines for the Jones Tract failure was \$10.6 million, for a length of 5¼ miles. [The repair cost for inundation (non-breach failure) of the M.A. is \$2 million per mile for all three pipelines].

6. What is the vulnerability of the M.A. to scour?

- EBMUD said that scour is unlikely where the M.A. is buried under the sloughs, at the crossings; see also #2 above. Failure may occur due to seismic shaking at the slough crossings.
- Where scour at a levee occurs, M.A. #3 may survive as long as the scour did not occur right at the pipeline location. M.A. #1 and #2 are vulnerable to scour failure.

7. What if repair times > 6 months (e.g., in a major earthquake)? What are options if one or more pipelines are out of service?

- The six months is the repair time window for M.A. #3. This window would be longer for M.A. # 1 and #2.
- EBMUD is not counting on SFPUC or CCWD in the event of an emergency. Water rationing/conservation would be initiated. Revenue losses to EBMUD could be significant, but EBMUD could not indicate what they might be. For short outages (e.g., one month), EBMUD would use water from their local reservoirs. (See URS IDS Risk Analysis Report, May 2005, for revenue loss estimates). Customer losses would be even more significant, especially for industrial customers.

8. We wanted to know whether the Freeport diversion project would be expected to operate if the levee it is on or near were to be breached. That is, we need to know whether we can assume that the project will always be in place once it is completed, or whether we should consider alternatives where it is out of commission, and how long it might be out of commission. We would like to check for whatever available information you have so that we may be able to answer this question.

- Sacramento will use the Freeport diversion facility “all the time”. EBMUD will use the facility for 3 years of 10 years (as part of drought planning). The levees at the facility are urban levees and are to be reinforced (Corps levees). The levees and the diversion facility are likely to be okay against flooding. If we need more information on the Freeport diversion facility, we will need to contact the Joint Powers Authority on the project.

DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS
INFORMATION REQUEST TABLE – PG&E (Gas Transmission)

Item No.	Information Request/Question	Information Provided/Response														
1	Asset Definition/Description: Are “as-built” drawings available showing basic details and dimensions of the infrastructure?	<p>Under the jurisdiction of the DOT and CPUC, PG&E maintains extensive drawings for its gas pipeline facilities.</p> <p>PG&E and other regulated pipelines submits Geospatial Data of our natural gas Transmission Pipeline to the NPMS, National Pipeline Mapping System. The dissemination of this data is regulated by the government as described on the NPMS web site: http://www.npms.rspa.dot.gov/application.asp?tact=Data&page=subapp.asp?app=data&act=data_req</p>														
	a. Confirmation of the location, number, and physical description (e.g., diameters of pipelines, number of towers, length of other assets).	<p>Total Transmission Pipelines - 434 Miles includes:</p> <table><tr><td>Backbone (L400/401)</td><td>83 miles</td><td>26” to 42” OD</td></tr><tr><td>Local Transmission/DFM</td><td>156 miles</td><td>4” to 24” OD</td></tr><tr><td>Gas Gathering</td><td>135 miles</td><td>2” to 16” OD</td></tr><tr><td>McDonald Island Storage</td><td>33 miles</td><td>6” to 24” OD</td></tr><tr><td>StanPac</td><td>27 miles</td><td>10” to 16” OD</td></tr></table> <p>The above does not include gas distribution pipelines operated below 60 psig, the majority of which provide gas to a limited number of localized customers except in major cities. The McDonald Island pipeline system includes all underground storage and delivery pipelines.</p>	Backbone (L400/401)	83 miles	26” to 42” OD	Local Transmission/DFM	156 miles	4” to 24” OD	Gas Gathering	135 miles	2” to 16” OD	McDonald Island Storage	33 miles	6” to 24” OD	StanPac	27 miles
Backbone (L400/401)	83 miles	26” to 42” OD														
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McDonald Island Storage	33 miles	6” to 24” OD														
StanPac	27 miles	10” to 16” OD														
	b. Information along island perimeters, such as slough cross-sections at pipeline/ bridge crossings.	<p>PG&E has used several methods for installing gas pipelines at water crossings:</p> <ol style="list-style-type: none">1. Exposed “overhead crossings” - generally used at shorter ditch crossings;2. Hung-on-bridge crossings - very limited use due to required permissions involved and limited-availability;3. Trenching - widely used for short to river-wide lengths in which a pipe was originally installed approximately 5 feet deep following the contours of the levee and stream-bed with a concrete water-break-wall on the top of the levee.4. Horizontal Directional Drilling (HDD) - Initiated in the mid-70s and widely adopted in the mid-80s for water crossings; benefits are ease of construction and reduced permitting and environmental issues. HDD construction will be extensively used for the installation of Line 57C for the McDonald Storage Field.														

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
1 cont'd.	c. Information on any flood protection (such as the height of berms around asset, reinforcement of structures). Information on any seismic retrofit; if retrofitted, what was the seismic design criteria?	<p>The majority of PG&E's gas assets are buried which provides the greatest protection compared to other construction alternatives. At levee crossings, a concrete water-break-wall (approximately 3'x3') is used on the crown to prevent water channeling along the pipe. Generally, pipelines installed within flood zones use a concrete coating or other anchoring technique to reduce the risk of floating. McDonald Island storage facility is the most critical PG&E facility in the area which could be impacted by flooding. However, its design is such that the critical equipment is constructed on platforms and valves would be identified with buoys if flooding occurs. The facility would still operate in a flooded condition, although at a reduced capacity.</p> <p>At PG&E's interconnection with Lodi Storage Field pipeline on Sherman Island, electrical equipment is located on an elevated second-story platform. If flooding occurs and this interconnection is isolated, continued operations is possible using redundant metering and control equipment at the upstream compressor station located approximately 30 miles away near Lodi.</p>
	d. Type of foundation (e.g., spread footings, piles – range of depths, etc.).	In the few locations where footings are used either mat foundation or pilings were designed and installed based upon engineering calculations and field conditions.
	e. Installation descriptions, such as above or below ground; pipe cover depths in sloughs and across islands.	<p>PG&E's standard is to install pipelines at a depth of 5 feet or greater which exceeds DOT standards (30" to 36"). A description of crossing alternatives is provided in Item 1.b above but the majority of river and slough crossings were installed using trenching techniques where the pipeline follows the contour of the river bottom and levee.</p> <p>The pipeline delivering gas from the McDonald Storage facility (Line 57B) will have a parallel pipeline installed by 2007 to increase reliability. The new pipeline (Line 57C) will use the latest technology to minimize risk to the pipeline if islands flood. The river crossings will be installed with horizontal directional drills (HDD) which will put the pipeline more than 60 feet below the river and away from the potential scour of a levee break.</p> <p>Line 401 also was installed in 1993 with HDD at river crossings. Line 400 (installed in 1963 with conventional trench construction across rivers) was installed with parallel pipelines across Sherman Island between and the San Joaquin and Sacramento River crossings for improved reliability.</p>

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
2	<p>Historical Data:</p> <p>a. <u>Repair Costs</u>: Do you have historical information on events that resulted in damage or failure of infrastructure? If so, what was the date of each event, the extent of the damage/failure, associated costs for repairs, time to complete repairs and the total outage time?</p>	<p>Mildred Island was flooded in the early-90s. From October 1 to November 1, 1995, a 120' section of Line 57A that had floated was anchored at a cost of approximately \$200,000. Again, on June 7, 2002, a 40' section of Line 57A was re-anchored after it floated at a cost of \$75,000.</p> <p>A levee break on Red Bridge Slough occurred in early February 1997 and \$53,000 was spent from February 14 to March 7 for emergency restoration of Line 108 (engineering evaluations and temporary supports). Later from May 21 to June 20, 1997, PG&E replaced 1000' of Line 108 at a cost of \$215,000. Customer services outside the flooded area were not disrupted. For comparison purposes, a more recent relocation project for Line 196 on Staten Island due to shallow cover cost approximately \$300 per foot of installed pipeline.</p> <p>Earlier this year, PG&E was informed that Grizzly Island (Suisun Wildlife Refuge) was flooded. However, PG&E's Line 182 and gas well meters were not adversely impacted.</p>
	<p>b. <u>Time for Repairs</u>: What is the expected outage time to make repairs of a failure/damage caused by a levee breach? Would you need to wait for the island to be drained before repairing the infrastructure? If yes, what would you do if flooding was extensive and prolonged? If not, what would be the impact of continued flooding on your repair costs?</p>	<p>Repair time can vary from hours to years depending upon the extent of damage and the necessity for immediate repair. This would be very difficult to predict without specific information and location. Generally, emergency response such as closing isolation valves or installing temporary supports is followed-up later with a permanent repair under drier field conditions. Construction periods are provided for the above situations.</p>
	<p>c. <u>Effect on Operations</u>: How did the outage affect your operations? Please provide an estimate of revenue loss and/or increase in operating costs (other than repair costs) for the above outage time.</p>	<p>Effects of the above incidents were minimal. Gas was generally rerouted so there were no significant customer outages. PG&E can minimize or eliminate the potential for outages when connecting relocated pipe by the use of "by-pass" fittings that allow uninterrupted connections.</p>
3	<p>Effect on Customers: What effect did outages have on customers? (e.g., reduced product deliveries, higher prices) How would customers be affected if the outage was more prolonged? What length would the outage have to be to result in more serious effects on customers?</p>	<p>Other than local impacts on individual customers and gas wells, PG&E's gas services have not been directly impacted by past levee damages. PG&E's response would typically be to close valves and isolated such affected areas. Generally, when customers in a flooded location are impacted, resuming gas services is not a critical need.</p>

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Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
4	Trends: Do you have any plans to increase or decrease the capacity of your assets in the Delta? What is the expected time frame?	Gas well depletion in the Delta areas have resulted in a reduction of PG&E's gas gathering facilities. Other than the construction of Line 57C, there are no immediate plans to change PG&E's gas infrastructure in the Delta. With minor exceptions, the pipelines are in easements and PG&E retains existing rights to be in its locations. If an outside-entity requires relocation, the cost will generally be paid by such entity.
5	Vulnerability Assessments: Have you performed any assessments, such as asset and business vulnerability assessment associated with events in the Delta (island flooding, seismic, wind events, etc.)? If so, can these studies be made available?	<p>On an annual basis, we perform a risk assessment of all pipelines in high consequence areas and we use this assessment to prioritize our inspections of pipelines in those areas as required by the System Integrity Rule (CFR 49 part 192, subpart O). The only consequence we consider for this assessment is the impact on the population living around the pipe section being assessed. Additionally on an annual basis, we perform a risk analysis of all our transmission pipelines (not just those in HCA's) that additionally takes into account impacts on the environment and system reliability.</p> <p>The first risk assessment is part of our System Integrity Program as mandated by the OPS (Office of Pipeline Safety and the CPUC. To identify affected pipe segments we use method II as allowed by subpart O and our Risk Management Procedure RMP-08 to identify, locate and document High Consequence Areas (HCA's) along transmission pipelines. Aerial photography and parcel information, along with care facility information provided by the state is used for this review. Those lines within HCA's are then scheduled for integrity assessments on a regular and prescribed schedule.</p> <p>Through an annual review process we identify changes in the extent of pipelines that exist within HCA's and adjust our assessment schedule accordingly.</p> <p>Our non-mandatory risk assessment program looks at all our transmission pipelines (including non-HCA's) and considers impacts on system reliability and the environment as well as affects on the population in arriving at a relative risk ranking of each pipeline segment. We use that ranking to help prioritize remediation work along the pipeline in order to lower overall system risk.</p>

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Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
6	Other Considerations: Is there any other information about your assets in the Delta that you think we should consider for our analysis?	<p>PG&E responds to all “one-call” USA digging notifications to identify any potential conflicts with construction activities in specific areas of interest.</p> <p>As discussed above, PG&E’s design, construction, operation and maintenance is under CPUC and DOT jurisdiction, and meets or exceeds the minimum Federal Pipeline Safety Standards as specified in Sections 191 and 192 in Title 49 of the Code of Federal Regulations.</p> <p>PG&E operates an extensive computer-based system to monitor operations on its transmission system. Any system or localized disruptions are immediately investigated and an Emergency Incident Response Plan would be initiated with State Emergency agencies as appropriate.</p> <p>For security purposes, large-scale facility information is not generally disseminated externally.</p>

PG&E – 10/20/06

DRMS PROJECT - DELTA ASSETS

PG&E Meeting Notes
December 8, 2006, 8:00 – 8:45

Meeting Participants

Wayman Pon, Gas Generation, PG&E

Mike Forrest, URS

Discussion

We have reviewed PG&E's information/responses to our information request, and have a few questions as noted below.

1. We would like to confirm the cost of, and times required for, repairs from the information provided by PG&E. We have summarized this information in the attached table. We note that emergency repairs (e.g., anchoring against flotation) have amounted to about \$1800/foot, while non-emergency repairs are considerably less, about \$300/foot. Are we interpreting this information correctly? If available, pipe diameters in the attached table would be useful for unit cost estimation.

Gas pipelines have not been ruptured, but have floated. The repair costs have been relatively low. Wayman will provide the pipe diameters in the attached table. And will check on the reason for work on Line 108.

2. Can a breached pipeline be repaired prior to pump out of an island (i.e., can the pipe be repaired under water)? Has such a repair been made? If a repair can be done under water, how long would a repair of a breach take?

Yes, a breached pipeline can be repaired prior to island pump out, but this would be very expensive. In the event of a failed pipeline, PG&E would isolate the failed segment by using automated valves. Customers on either side of the failed pipeline segment would be supported by other gas pipelines in the system.

3. What is the vulnerability of the gas pipelines to flooding of an island?

If there were just inundation, with no scour, the pipelines would generally not be vulnerable to damage. This is because the pipelines are typically buried 5 feet deep; this burial depth would preclude flotation. A pipeline in an inundated island would be monitored.

McDonald Island was flooded in the summer 1982 due to levee failure. The equipment is on platforms 30' above ground. There was no adverse impact on the equipment.

4. What is the vulnerability of the gas pipelines to scour erosion? Scour holes are estimated to be 50 feet deep at island perimeters.

Pipelines are vulnerable to damage from scour. Scouring would remove the soil cover, and the pipeline would float. There has not been a ruptured pipeline as a result of island scour, because

the steel pipelines are flexible. PG&E would reduce the operating pressure in a pipeline that floats, and would repair it by anchoring. [Note: If a pipeline were to be in the direct path of a scour hole that has a length of 2000', such an event could rupture a pipeline due to the high velocity and turbulent flow conditions.]

5. I would like to confirm PG&E gas pipeline locations and diameters on a GIS map that URS will provide.

DWR can get a password to obtain PG&E pipeline locations (Joel Dudas, DWR, is following up on this.) There are some differences between the GIS data that we have and PG&E's data.

The main pipelines to consider in the DRMS study are:

- Backbone (L400/401): 83 miles on west side of Delta, 26" to 42" OD
- Line 196: 12" to 16" OD, mostly 16" OD
- Line 108: 16" to 24" OD, mostly 24" OD
- StanPac (Standard Oil, now Chevron, and PG&E): 27 miles, 10" to 16" OD
- McDonald Island Storage: 33 miles, Lines 57A/B, 6" to 24" OD; Line 57C is under construction and will be on line in 2007. This new line will provide redundancy for gas delivery from the gas field.

Minor pipelines are:

- Local Transmission/DFM: 156 miles, 4" to 24" OD
- Gas Gathering (minor pipelines): 135 miles, 2" to 16" OD

6. We would also like to discuss with you what options are available if one or more pipelines are out of service for an extended period of time.

See discussion under No. 2 above. Customers would be served by other pipelines in the system. In essence, PG&E can serve customers by re-routing natural gas through other pipelines in the system, prior to repairs being made. There is no history of response to large system outages due to multiple pipeline failures.

PG&E
Gas Pipeline Repair Cost Summary Table
(Ref: Response Table from PG&E)

Pipeline	Event	Remedial Action/Project	Date	Duration (days)	Length (ft)	Diameter (in)	Repair Cost	Cost/Foot
Mildred Island, Line 57A	Flotation	Anchored pipe	10/1/95 – 11/1/95	30	120	18	\$200,000	\$1670
Line 57A	Flotation	Anchored pipe	6/7/02	?	40	18	\$75,000	\$1875
Red Bridge Slough, Line 108	Levee Break	Emergency restoration	2/14/97 – 3/7/97	20	?	16 to 24	\$53,000	
Line 108	Scour of levee; pipe flotation	Anchored pipe and subsequent replacement	5/21/97 – 6/20/97	30	1000	16 to 24	\$215,000	\$215
Staten Island, Line 196	Relocation Project					12 to 16		\$300

DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS
INFORMATION REQUEST TABLE – PG&E (Electric Transmission)

Item No.	Information Request/Question	Information Provided/Response												
1	Asset Definition/Description: Are “as-built” drawings available showing basic details and dimensions of the infrastructure?	<p>Under the jurisdiction of FERC (Federal Energy Regulatory Commission) and CPUC (California Public Utilities Commission), PG&E maintains extensive drawings for its electric transmission facilities.</p> <p>PG&E and other regulated transmission owners submit lists of our electric transmission assets to FERC. The dissemination of this data is regulated by the government as described on the FERC web site: http://www.ferc.gov.</p> <p>PG&E designs and builds electric transmission lines based on its own standards. These standards meet or exceed the minimum requirements of the CPUC General Order No. 95 (G.O. 95) “Rules For Overhead Electric Line Construction”.</p>												
	a. Confirmation of the location, number, and physical description (e.g., diameters of pipelines, number of towers, length of other assets).	<p>Total Electric Transmission Lines (Approximate) within the Legal Delta and Suisun Marsh areas – 820 Circuit Miles and 6350 structures include:</p> <table><tr><td>500 kV</td><td>60 circuit miles</td><td>240 towers</td></tr><tr><td>230 Kv</td><td>220 circuit miles</td><td>560 towers</td></tr><tr><td>115 kV</td><td>310 circuit miles</td><td>2050 towers/poles</td></tr><tr><td>60 kV</td><td>230 circuit miles</td><td>3500 towers/poles</td></tr></table>	500 kV	60 circuit miles	240 towers	230 Kv	220 circuit miles	560 towers	115 kV	310 circuit miles	2050 towers/poles	60 kV	230 circuit miles	3500 towers/poles
	500 kV	60 circuit miles	240 towers											
	230 Kv	220 circuit miles	560 towers											
	115 kV	310 circuit miles	2050 towers/poles											
60 kV	230 circuit miles	3500 towers/poles												
b. Information along island perimeters, such as slough cross-sections at pipeline/ bridge crossings.	<p>As stated above, PG&E designs and builds electric transmission lines based on its own standards which meet or exceed the minimum requirements of G.O. 95. This standard covers building transmission lines across bridges and water surfaces.</p>													
c. Information on any flood protection (such as the height of berms around asset, reinforcement of structures). Information on any seismic retrofit; if retrofitted, what was the seismic design criteria?	<p>PG&E designs and builds electric transmission lines to withstand effects of wind, temperature, and ice when applicable. The effect of the temperature and loading conditions are more stringent than the effect of the earthquake on the structures and foundations.</p>													
d. Type of foundation (e.g., spread footings, piles – range of depths, etc.).	<p>The transmission lines at 500 kV, 230 kV, and 115 kV voltage levels within the Legal Delta and Suisun Marsh areas are constructed on tower structures. Most of the towers have augered footings with a minimum diameter of 2 feet and at various depths. Only about 10 percent of the towers are on pile foundations.</p>													

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
1 cont'd.		<p>The 500 kV transmission lines are constructed on single circuit tower structures. The depths of the footings range from 9 feet to 15 feet.</p> <p>Majority of the 230 kV transmission lines are constructed on double-circuit tower structures. The depths of the footings range from 9 feet to 20 feet.</p> <p>Majority of the 115 kV transmission lines are constructed on double-circuit tower structures. The depths of the footings range from 7.5 feet to 12.5 feet. Some of the 115 kV lines are constructed on wood poles. Based on the wood pole standards, the typical depths of the pole settings range from 5 feet to 10 feet.</p> <p>Almost all the 60 kV transmission lines are constructed on wood poles. The classes and settings of wood poles are designed to meet or exceed the minimum requirements of G.O. 95. The pole setting depths of wood poles varies from 5 feet to 10 feet depending on the height of the wood poles. Some of the 60 kV transmission lines are constructed on tubular steel poles. The typical foundation size for tubular steel poles at this voltage level is about 4.5 feet in diameter and 17 feet deep.</p>
	e. Installation descriptions, such as above or below ground; pipe cover depths in sloughs and across islands.	Almost all transmission line structures are constructed above ground. In this area, only a very small portion of the transmission lines are constructed below ground.
2	Historical Data:	No history of flooding events that resulted in damage or failure of infrastructure.
	a. <u>Repair Costs</u> : Do you have historical information on events that resulted in damage or failure of infrastructure? If so, what was the date of each event, the extent of the damage/failure, associated costs for repairs, time to complete repairs and the total outage time.	Not applicable.
	b. <u>Time for Repairs</u> : What is the expected outage time to make repairs of a failure/damage caused by a levee breach? Would you need to wait for the island to be drained before repairing the infrastructure? If yes, what would you do if flooding was extensive and prolonged? If not, what would be the impact of continued flooding on your repair costs?	Not applicable.

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Item No.	Information Request/Question	Information Provided/Response
2 cont'd.	c. <u>Effect on Operations</u> : How did the outage affect your operations? Please provide an estimate of revenue loss and/or increase in operating costs (other than repair costs) for the above outage time.	Not applicable.
3	Effect on Customers: What effect did outages have on customers? (e.g., reduced product deliveries, higher prices) How would customers be affected if the outage was more prolonged? What length would the outage have to be to result in more serious effects on customers?	Transmission line outages affect customers depending on the duration and frequencies of the outages. The impact of the outages depends on the customer class, i.e., residential, commercial, industrial, or agricultural, and how the affected customers manage the outage. The outages may inconvenience the customers and cause economic loss.
4	Trends: Do you have any plans to increase or decrease the capacity of your assets in the Delta? What is the expected time frame?	In accordance with the California Independent System Operator (CAISO) tariff, PG&E is required to submit annually an electric transmission facility expansion plan to the CAISO. This expansion plan is required to identify transmission upgrades that are needed to ensure PG&E's transmission facilities performance continue to meet all applicable planning criteria. PG&E submitted PG&E's 2005 Electric Transmission Grid Expansion Plan to the CAISO which documented PG&E's plan for the next ten years (2006 to 2015). The report identified projects in the Delta area to be completed in 2007 to 2010 timeframe. Additional projects may be identified in the 2006 report and the succeeding reports.
5	Vulnerability Assessments: Have you performed any assessments, such as asset and business vulnerability assessment associated with events in the Delta (island flooding, seismic, wind events, etc.)? If so, can these studies be made available?	No.
6	Other Considerations: Is there any other information about your assets in the Delta that you think we should consider for our analysis?	If flooding occurs in the Delta area and the flooded area becomes navigable, then PG&E may have to raise the existing structures to conform with clearance requirements of G.O. 95.

PG&E – 11/13/06

**DELTA RISK MANAGEMENT STRATEGY
MEETING WITH MAJOR DELTA ASSET OWNERS
INFORMATION REQUEST TABLE – CCWD**

Item No.	Information Request/Question	Information Provided/Response																																											
1	Asset Definition/Description: Are “as-built” drawings available showing basic details and dimensions of the infrastructure?	CCWD’s facilities located in the Delta include sections of the Contra Costa Canal, Pumping Plants No. 1 through No. 4, Mallard Slough Pump Station, and the Old River Pump Station. As-Built drawings are available for review at CCWD’s administrative offices.																																											
	k. Confirmation of the location, number, and physical description (e.g., diameters of pipelines, number of towers, length of other assets).	<div>a. Description of CCWD Delta Facilities</div> <table><tr><th>Facility</th><th>Northing</th><th>Easting</th><th>Pump Capacity</th></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>Old River Pump Station</td><td>2,147,371.70</td><td>6,250,969.02</td><td>Pump 1 (2100HP, 26030 GPM) Pump 2 (2100HP, 26030 GPM) Pump 3 (2100HP, 26030 GPM) Pump 4 (2100HP, 26030 GPM) Pump 5 (2100HP, 26030 GPM)</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>Mallard Slough Pump Station</td><td>2,202,682.02</td><td>6,150,409.75</td><td>Pump 1 (800HP, 17400 GPM) Pump 2 (800HP, 17400 GPM)</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>Rock Slough Intake¹</td><td>2,179,838.38</td><td>6,232,760.72</td><td>NA – Begins unlined Contra Costa Canal</td></tr><tr><td>Pumping Plant No. 1</td><td>2,187,199.31</td><td>6,215,372.07</td><td rowspan="4">Pump 1 (125HP, 13912 GPM) Pump 2 (400HP, 47124 GPM) Pump 3 (400HP, 41738 GPM) Pump 4 (250HP, 27825 GPM) Pump 5 (250HP, 27825 GPM) Pump 6 (125HP, 13912 GPM)</td></tr><tr><td>Pumping Plant No. 2</td><td>2,184,378.498</td><td>6,212,894.227</td></tr><tr><td>Pumping Plant No. 3</td><td>2,182,915.317</td><td>6,207,526.494</td></tr><tr><td>Pumping Plant No. 4</td><td>2,182,634.885</td><td>6,201,481.722</td></tr></table> <div>1. The Rock Slough intake is the beginning of the Contra Costa Canal. The intake channel is approximately 4 miles in length and consists of five earthen channel segments and four concrete siphons. 2. All coordinates are NAD83.</div>				Facility	Northing	Easting	Pump Capacity					Old River Pump Station	2,147,371.70	6,250,969.02	Pump 1 (2100HP, 26030 GPM) Pump 2 (2100HP, 26030 GPM) Pump 3 (2100HP, 26030 GPM) Pump 4 (2100HP, 26030 GPM) Pump 5 (2100HP, 26030 GPM)					Mallard Slough Pump Station	2,202,682.02	6,150,409.75	Pump 1 (800HP, 17400 GPM) Pump 2 (800HP, 17400 GPM)					Rock Slough Intake ¹	2,179,838.38	6,232,760.72	NA – Begins unlined Contra Costa Canal	Pumping Plant No. 1	2,187,199.31	6,215,372.07	Pump 1 (125HP, 13912 GPM) Pump 2 (400HP, 47124 GPM) Pump 3 (400HP, 41738 GPM) Pump 4 (250HP, 27825 GPM) Pump 5 (250HP, 27825 GPM) Pump 6 (125HP, 13912 GPM)	Pumping Plant No. 2	2,184,378.498	6,212,894.227	Pumping Plant No. 3	2,182,915.317	6,207,526.494	Pumping Plant No. 4	2,182,634.885
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Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
1 cont'd.	l. Information along island perimeters, such as slough cross-sections at pipeline/ bridge crossings.	b. Cross sections of the unlined canal are available for review at the District's administrative offices
	m. Information on any flood protection (such as the height of berms around asset, reinforcement of structures). Information on any seismic retrofit; if retrofitted, what was the seismic design criteria?	c. Old River – The Old River Pump Station is situated within a setback levee constructed as part of the project in 1997. The elevation of the setback levee is approximately +11.5 feet Rock Slough Intake – The first four miles of the Contra Costa Canal are unlined and situated between non-engineered levees/berms. The levees have a minimum elevation of +10.5 feet. The existing levees/berms are not suitable for flood protection. Mallard Slough Pump Station – The Mallard Slough Pump Station was rehabilitated as part of the District's Seismic Reliability Improvements Program. Seismic criteria utilized included an Importance Factor of 1.5, Risk Zone 4, Rv 2, Ca 0.6, and Cv 1.15.
	n. Type of foundation (e.g., spread footings, piles – range of depths, etc.).	d. Old River – Foundation consists of 24" concrete piles with depths of approximately 50 feet Mallard Slough Pump Station – Foundation consists of 24" concrete piles with depths of approximately 65 feet
	o. Installation descriptions, such as above or below ground; pipe cover depths in sloughs and across islands.	e. As-Built drawings are available for review at CCWD's administrative offices.
2	Historical Data: g. <u>Repair Costs</u> : Do you have historical information on events that resulted in damage or failure of infrastructure? If so, what was the date of each event, the extent of the damage/failure, associated costs for repairs, time to complete repairs and the total outage time?	a. 1998 Emergency Repairs to Unlined Canal – A portion of the unlined canal was reinforced with riprap at a cost of about \$100,000.
	h. <u>Time for Repairs</u> : What is the expected outage time to make repairs of a failure/damage caused by a levee breach? Would you need to wait for the island to be drained before repairing the infrastructure? If yes, what would you do if flooding was extensive and prolonged? If not, what would be the impact of continued flooding on your repair costs?	b. Failure of the levees/berms along the unlined canal has the potential to cause flooding on portions of Hotchkiss Tract and areas south of the Canal. The potential for flooding in these areas will be eliminated with the implementation of the Canal Replacement Project. If flooding along the unlined canal was extensive, the District would transfer pumping to its Old River Intake located near Highway 4, and would supplement pumping as needed with releases from the Los Vaqueros Reservoir. If Byron Tract flooded, the pumping plant is located in a setback levee and would be accessible by boat. When drained, the pipeline would be repairable and useable. Supply from Los Vaqueros would be available and unaffected by levee failure.

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Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
2 cont'd.	i. <u>Effect on Operations</u> : How did the outage affect your operations? Please provide an estimate of revenue loss and/or increase in operating costs (other than repair costs) for the above outage time.	c. Andrus Island Levee Failure – Caused chloride concentrations in excess of 440 mg/l at the District's Rock Slough Intake. Approximately one-third of CCWD's demands are from major industrial customers, including two oil refineries, steel and chemical manufacturing facilities. Increase salinity increases operating costs for the District and its customers and can cause damage to industrial equipment. Jones Tract Levee Failure - CCWD switched its source of Delta supply from the Old River Intake to Rock Slough
3	Effect on Customers: What effect did outages have on customers? (e.g., reduced product deliveries, higher prices) How would customers be affected if the outage was more prolonged? What length would the outage have to be to result in more serious effects on customers?	See above response.

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
4	Trends: Do you have any plans to increase or decrease the capacity of your assets in the Delta? What is the expected time frame?	<p>Non-Capacity Related Improvements in the Delta</p> <p>1. Canal Replacement Project – This project includes replacing the unlined Contra Costa Canal with a 10 foot diameter buried pipeline. The purpose of the project is to protect the District’s drinking water supply from existing and future water quality degradation, improve flood protection, and enhance public safety and security. Construction of Phase 1 of the project is expected to commence in 2008</p> <p>2. Alternative Intake Project – This project is a water quality project that will improve CCWD’s drinking water quality by constructing a new intake in the Delta. It will consist of constructing and operating a new, screened water intake (with a maximum capacity of 250 cfs and pump station located along the lower third of Victoria Canal on Victoria Island in the central Delta. A buried pipeline will be constructed from the new intake across Victoria Island and Old River and tie into CCWD’s existing Old River conveyance system on Byron Tract. Construction is expected to begin in 2009.</p> <p>3. Los Vaqueros Expansion - Expansion of Los Vaqueros Reservoir from 100,000 acre-feet up to 500,000 acre-feet is currently being evaluated as part of the ongoing State and Federal effort to improve Bay Area drought supply and water quality and to contribute to protection and restoration of Delta fisheries by providing water to the Environmental Water Account (EWA). The Expansion Project would include expansion of CCWD’s Delta intakes, pump stations, and conveyance facilities and enlargement of the existing Los Vaqueros Dam. The Draft EIS/EIR and Federal Feasibility Report are scheduled to be completed in fall 2007 and finalized in summer 2008. Congressional authorization will be required for the project to proceed into design and construction. The earliest possible date for completion of construction is 2016.</p>
5	Vulnerability Assessments: Have you performed any assessments, such as asset and business vulnerability assessment associated with events in the Delta (island flooding, seismic, wind events, etc.)? If so, can these studies be made available?	<p>Los Vaqueros – One of the primary purposes of the 100,000 acre-foot Los Vaqueros Reservoir was to provide emergency storage for the District’s customers in the event of a catastrophic event in the Delta. The reservoir provides a minimum of 3 months of emergency storage.</p> <p>Seismic Reliability Improvement Project (SRIP) - CCWD completed a study of the seismic reliability and capacity of its water distribution facilities in 1997. As a result of the study, CCWD has completed three major capital projects that improve the capacity and reliability of the raw water system to meet future demands, as well as to meet fire flow needs following a major earthquake. These projects are: Raw Water Seismic Improvement Project, which reinforced seven areas of seismic vulnerability along the Contra Costa Canal; the Mallard Slough Pump Station project, which replaced the existing 65 year old Mallard Slough intake at Bay Point; and the Multi-Purpose Pipeline (MPP), which is a 22-mile long pipeline to supplement the capacity of the Contra Costa Canal.</p> <p>The MPP provides a highly secure water supply. The Contra Costa Canal and Mallard Slough Pump Station are available for fire flow at any time.</p> <p>The SRIP study is available for review at the District’s administrative offices.</p>

Appendix B

Data Provided By Asset Owners

Item No.	Information Request/Question	Information Provided/Response
6	Other Considerations: Is there any other information about your assets in the Delta that you think we should consider for our analysis?	CCWD relies entirely on the Delta to supply water to its 500,000 customers throughout northern, central and eastern Contra Costa County. Therefore, any change in the Delta that substantially degrades water quality will severely impact CCWD's ability to provide safe, reliable drinking water to its customers. Currently, CCWD's primary means of ensuring that federal disinfection by-product standards are met in treated water are to ensure that bromide and TOC levels in the source water from the Delta are maintained below certain thresholds. Pathogens, nutrients, and other constituents also contribute to the challenges of meeting regulations for treated water using Delta water as the source. CCWD adjusts operations daily to meet water quality goals in water delivered by CCWD to its customers. In order to deliver consistently good quality water throughout the year, CCWD diverts low salinity water from the Old River Intake in the spring for storage in Los Vaqueros Reservoir, and then releases water from the Reservoir to blend with Delta diversions when salinity is higher in the fall. CCWD's customers approved the \$450 million Los Vaqueros Project in 1988, in order to improve the quality of water supplied to CCWD customers, to minimize seasonal quality changes, and to improve the reliability of the emergency water supply available to CCWD. (CCWD now has a minimum of three months' emergency water supply at all times.) Abandoning the Delta as a water conveyance system following a catastrophic failure of the Delta levees would leave CCWD and its customers with no source of drinking water and hundreds of millions of dollars of stranded assets.

We appreciate your effort to obtain the requested information. We would appreciate any information that you can provide by October 23, 2006. Please contact me if you have any questions. Thank you:

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Appendix C
Description of Information in Asset Tables

C.1 Description of Information in Inundation Tables

The estimate of asset damage in Tables 7-1, 7-2, 7-4, and 7-5 lists the asset types present in each analysis zone, along with the quantity of each asset, depth of inundation to which the asset would be exposed, percentage of damage incurred by the various assets, value of the assets⁵, estimated repair costs resulting from inundation, and the time estimated for repairs. The total repair costs and total asset value are indicated at the top of the table in an orange box.

Some assets have been attributed a value by HAZUS, while others have not. For assets that have not been attributed a value by HAZUS, the value was estimated by using the quantity and the unit value. Below is a description of each column (in the Excel spreadsheets) in the tables:

- Column 1 – **Island Name**: The name of the analysis zone (see Figures 3-2, 3-3, and 3-4 for maps of analysis zones).
- Column 2 – **Asset Type**: The type of asset (e.g., highway, school, etc.).
- Column 3 – **Inventory Unit**: This column indicates the unit that is used to measure the quantity of each asset.
- Column 4 – **GIS Quantity**: This is the quantity of each asset.
- Column 5 – **Avg Inundation Depth**: This is the average inundation depth for each asset.
- Column 6 – **Percent Damage**: This column indicates the percentage of damage that is used to calculate the repair costs. FEMA considers a structure that incurs more than 50% damage to be completely damaged (i.e., 100% damage), so this column indicates the percentage of damage that is used by FEMA to calculate damage costs. It is assumed the Delta corresponds to a Coastal Zone A (as opposed to a Coastal Zone V or a Riverine zone), as defined by HAZUS. Thus, percentages of damage used for single-family residences and manufactured housing (HAZUS designations “RES1” and “RES2”, respectively) correspond to percentage of damage for occupancies in a Coastal Zone A.
- Column 7 – **Total Asset Value**: This column represents the value (structure replacement cost plus contents) of each asset.
- Column 8 – **Inundation Repair Costs**: This column represents the repair cost for each asset, based on the depth of inundation, the percentage of damage incurred, and the original value of the asset (or based on other repair cost estimates).
- Column 9 – **Per Island Inundation Repair Costs**: This column sums the repair costs per island.
- Column 10 – **Per Island Asset Value**: This column sums the asset values per island.
- Column 11 – **Repair Time**: This column indicates the repair time in months.

⁵ In the context of this TM, “asset value” means replacement cost.

C.2 Description of Information in Scour Tables

The estimates of asset damage in Tables 7-3 and 7-6 list the asset types present in each analysis zone, along with the quantity of each asset, percent damage to which the asset was exposed in the corresponding inundation event, value of the assets, estimated repair costs resulting from inundation, estimated additional repair costs for a scour event, and the estimated repair costs for scour in a 1,000-foot increment along the island perimeters.

Figure 4-2 indicates the areas around the island perimeters that would be potentially vulnerable to scour damage. Scour holes (2000 feet long x 500 feet wide) could occur anywhere within the island perimeters shown on Figure 4-2.

The content of each column is outlined below:

- Column 1 – **Island Name:** The name of the analysis zone (see Figures 3-2, 3-3, and 3-4 for maps of analysis zones).
- Column 2 – **Asset Type:** The type of asset (e.g., highway, school, etc.).
- Column 3 – **Structure Type:** The type of asset (e.g., linear or point).
- Column 4 – **Inventory Unit:** This column indicates the unit that is used to measure the quantity of each asset.
- Column 5 – **GIS Quantity:** This is the quantity of each asset.
- Column 6 – **Percent Damage:** This is the percent damage incurred by the asset in either the MHHW or the 100-year flood.
- Column 7 – **Total Asset Value:** This column represents the value (replacement cost) of each asset.
- Column 8 – **Inundation Repair Costs (MHHW or 100-year Flood):** This column indicates the repair costs incurred in either the MHHW or 100-year inundation scenario.
- Column 9 – **Differential Repair Costs:** This is the additional repair cost incurred in a scour scenario. To avoid double counting the damage costs of assets within the 2000-ft scour zone, the Scour spreadsheets estimate the differential. Differential cost = [asset value (replacement cost) in 2000-ft scour zones] minus [cost damage due to inundation in the 2000-ft scour zones, for the MHHW event and for the 100-year flood].
- Column 10 – **Inundation Repair Costs – By Island (MHHW or 100-year flood):** This is the sum of the inundation repair costs by island.
- Column 11 – **Differential Costs for Point Assets – By Island:** This is the sum of repair costs incurred in the event of scour. This column sums the repair costs for each island and includes point assets only.
- Column 12 – **1,000 ft Increment Cost for Point Assets – By Island:** This is the estimate of the replacement costs due to scour (i.e., the differential cost) for each

Appendix C

Description of Information in Asset Tables

1,000 ft increment along the perimeter of the scour zone. This value is estimated by prorating the differential cost of the entire island as follows: $[(1,000 \text{ ft}) / (\text{perimeter of scour zone})] * [\text{differential cost for entire scour zone of the island}] = \text{estimated replacement cost for each 1,000 ft increment}$.

- **Column 13 – Differential Repair Costs for Linear Assets – By Island:** This is the sum of repair costs incurred in the event of scour. This column sums the repair costs by island for linear assets only.